```
Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:ssptaysc1617

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
 NEWS  2          "Ask CAS" for self-help around the clock
 NEWS  3  SEP 09  ACD predicted properties enhanced in REGISTRY/ZREGISTRY
 NEWS  4  OCT 03  MATHDI removed from STN
 NEWS  5  OCT 04  CA/CAplus-Canadian Intellectual Property Office (CIPO) added
                  to core patent offices
 NEWS  6  OCT 13  New CAS Information Use Policies Effective October 17, 2005
 NEWS  7  OCT 17  STN(R) AnaVist(TM), Version 1.01, allows the export/download
                  of CAplus documents for use in third-party analysis and
                  visualization tools
 NEWS  8  OCT 27  Free KWIC format extended in full-text databases
 NEWS  9  OCT 27  DIOGENES content streamlined
 NEWS 10  OCT 27  EPFULL enhanced with additional content
 NEWS 11  NOV 14  CA/CAplus - Expanded coverage of German academic research
 NEWS 12  NOV 30  REGISTRY/ZREGISTRY on STN(R) enhanced with experimental
                  spectral property data
 NEWS 13  DEC 05  CASREACT(R) - Over 10 million reactions available
 NEWS 14  DEC 14 2006 MeSH terms loaded in MEDLINE/LMEDLINE
 NEWS 15  DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
 NEWS 16  DEC 14 CA/CAplus to be enhanced with updated IPC codes
 NEWS 17  DEC 16 MARPATprev will be removed from STN on December 31, 2005
 NEWS 18  DEC 21 IPC search and display fields enhanced in CA/CAplus with the
                 IPC reform
 NEWS 19  DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/USPAT2

 NEWS EXPRESS  DECEMBER 02 CURRENT VERSION FOR WINDOWS IS V8.01,
               CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 02 DECEMBER 2005.
               V8.0 USERS CAN OBTAIN THE UPGRADE TO V8.01 AT
               http://download.cas.org/express/v8.0-Discover/

 NEWS HOURS    STN Operating Hours Plus Help Desk Availability
 NEWS INTER    General Internet Information
 NEWS LOGIN    Welcome Banner and News Items
 NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
 NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

  All use of STN is subject to the provisions of the STN Customer
  agreement.  Please note that this agreement limits use to scientific
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  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 12:18:47 ON 27 DEC 2005

=> file reg
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                       ENTRY    SESSION
FULL ESTIMATED COST                                     0.21       0.21
```

FILE 'REGISTRY' ENTERED AT 12:18:56 ON 27 DEC 2005

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 26 DEC 2005 HIGHEST RN 870675-00-6
DICTIONARY FILE UPDATES: 26 DEC 2005 HIGHEST RN 870675-00-6

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

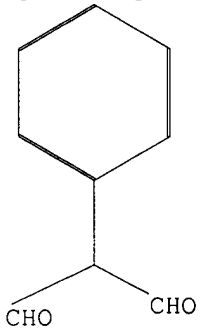
```
**********************************************************************
*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,   *
* effective March 20, 2005.  A new display format, IDERL, is now    *
* available and contains the CA role and document type information. *
*                                                                    *
**********************************************************************
```

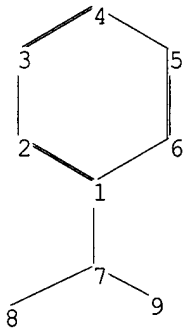
Structure search iteration limits have been increased. See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Program Files\Stnexp\Queries\10769598-1.str





chain nodes :
7 8 9
ring nodes :
1 2 3 4 5 6
chain bonds :
1-7 7-8 7-9
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact bonds :
1-7 7-8 7-9
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS

```
L1      STRUCTURE UPLOADED

=>  s l1
SAMPLE SEARCH INITIATED 12:19:11 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     2794 TO ITERATE

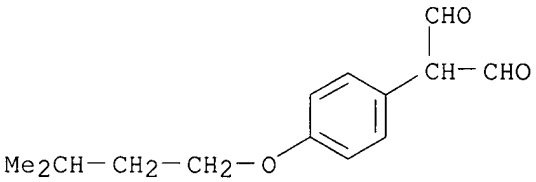
 71.6% PROCESSED     2000 ITERATIONS                                 2 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        52710 TO    59050
PROJECTED ANSWERS:               2 TO      155

L2            2 SEA SSS SAM L1

=> d scan 1-2
'1-2' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'

L2   2 ANSWERS   REGISTRY  COPYRIGHT 2005 ACS on STN
IN   Propanedial, [4-(3-methylbutoxy)phenyl]- (9CI)
MF   C14 H18 O3
```




```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


The following are valid formats:

Substance information can be displayed by requesting individual
fields or predefined formats.  The predefined substance formats
are:  (RN = CAS Registry Number)

REG    - RN
SAM    - Index Name, MF, and structure - no RN
FIDE   - All substance data, except sequence data
IDE    - FIDE, but only 50 names
SQIDE  - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD    - Protein sequence data, includes RN
SQD3   - Same as SQD, but 3-letter amino acid codes are used
SQN    - Protein sequence name information, includes RN

CALC   - Table of calculated properties
EPROP  - Table of experimental properties
PROP   - EPROP and CALC

Any CA File format may be combined with any substance format to
obtain CA references citing the substance.  The substance formats
must be cited first.  The CA File predefined formats are:

ABS  -- Abstract
APPS -- Application and Priority Information
BIB  -- CA Accession Number, plus Bibliographic Data
CAN  -- CA Accession Number
```

CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND -- Index Data
IPC -- International Patent Classification
PATS -- PI, SO
STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels
IBIB -- BIB, indented, with text labels
ISTD -- STD format, indented

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

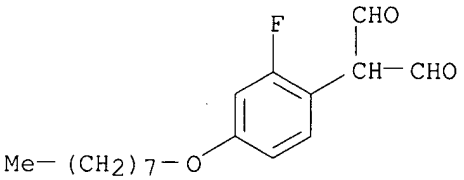
SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when
it is available.
The MAX format is the same as ALL.
The IALL format is the same as ALL with BIB ABS and IND indented,
with text labels.

For additional information, please consult the following help
messages:

HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

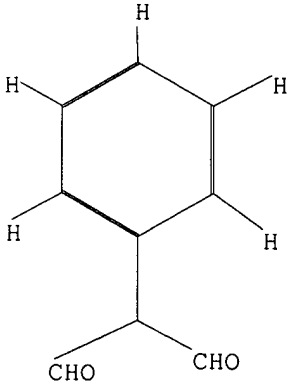
L2   2 ANSWERS   REGISTRY COPYRIGHT 2005 ACS on STN
IN   Propanedial, [2-fluoro-4-(octyloxy)phenyl]- (9CI)
MF   C17 H23 F O3

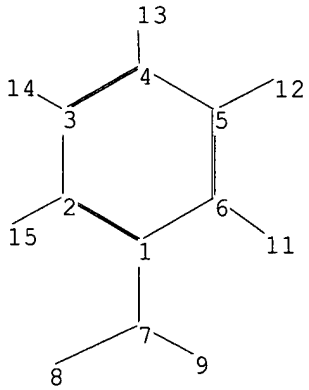


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=>
Uploading C:\Program Files\Stnexp\Queries\10769598-2.str





chain nodes :
7 8 9 11 12 13 14 15

```
ring nodes :
1  2  3  4  5  6
chain bonds :
1-7  2-15  3-14  4-13  5-12  6-11  7-8  7-9
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6
exact bonds :
1-7  2-15  3-14  4-13  5-12  6-11  7-8  7-9
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6
isolated ring systems :
containing 1 :


Match level :
1:Atom  2:Atom  3:Atom  4:Atom  5:Atom  6:Atom  7:CLASS  8:CLASS  9:CLASS  11:CLASS  12:CLASS
13:CLASS  14:CLASS  15:CLASS



L3      STRUCTURE UPLOADED

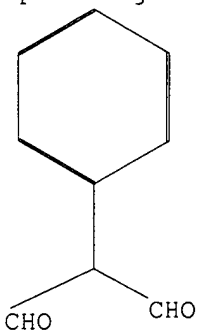
=> s l3
SAMPLE SEARCH INITIATED 12:22:11 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -     2794 TO ITERATE

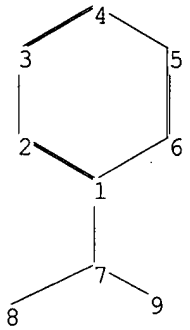
 71.6% PROCESSED     2000 ITERATIONS                                  0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        52710 TO    59050
PROJECTED ANSWERS:               0 TO        0

L4            0 SEA SSS SAM L3

=>
Uploading C:\Program Files\Stnexp\Queries\10769598-3.str
```






```
chain nodes :
7  8  9
ring nodes :
1  2  3  4  5  6
chain bonds :
1-7  7-8  7-9
ring bonds :
1-2  1-6  2-3  3-4  4-5  5-6
exact bonds :
1-7  7-8  7-9
normalized bonds :
1-2  1-6  2-3  3-4  4-5  5-6
isolated ring systems :
containing 1 :


Match level :
```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS

L5 STRUCTURE UPLOADED

=> s l5
SAMPLE SEARCH INITIATED 12:23:19 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2794 TO ITERATE

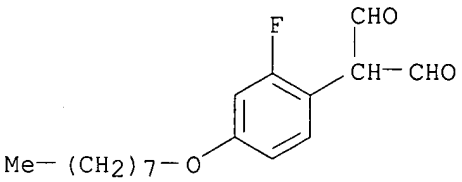
71.6% PROCESSED 2000 ITERATIONS 2 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 52710 TO 59050
PROJECTED ANSWERS: 2 TO 155

L6 2 SEA SSS SAM L5

=> d scan

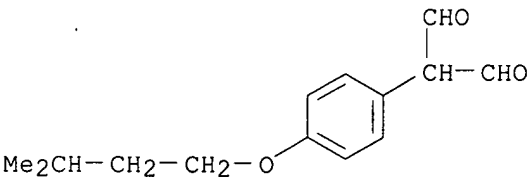
L6 2 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Propanedial, [2-fluoro-4-(octyloxy)phenyl]- (9CI)
MF C17 H23 F O3



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

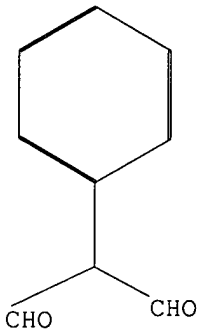
L6 2 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Propanedial, [4-(3-methylbutoxy)phenyl]- (9CI)
MF C14 H18 O3

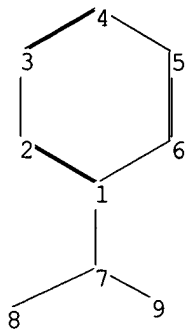


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=>
Uploading C:\Program Files\Stnexp\Queries\10769598-4.str





chain nodes :
7 8 9
ring nodes :
1 2 3 4 5 6
chain bonds :
1-7 7-8 7-9
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6
exact bonds :
1-7 7-8 7-9
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6
isolated ring systems :
containing 1 :

Hydrogen count :
2:>= minimum 5
Connectivity :
2:0 M minimum RC ring/chain
Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS

L7 STRUCTURE UPLOADED

=> s l7
SAMPLE SEARCH INITIATED 12:24:48 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 2794 TO ITERATE

71.6% PROCESSED 2000 ITERATIONS 0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 52710 TO 59050
PROJECTED ANSWERS: 0 TO 0

L8 0 SEA SSS SAM L7

=> d his

(FILE 'HOME' ENTERED AT 12:18:47 ON 27 DEC 2005)

FILE 'REGISTRY' ENTERED AT 12:18:56 ON 27 DEC 2005
L1 STRUCTURE UPLOADED
L2 2 S L1
L3 STRUCTURE UPLOADED
L4 0 S L3
L5 STRUCTURE UPLOADED
L6 2 S L5
L7 STRUCTURE UPLOADED
L8 0 S L7

```
=> s l2 full
FULL SEARCH INITIATED 12:26:00 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -    54912 TO ITERATE

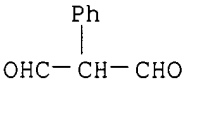
100.0% PROCESSED    54912 ITERATIONS                                  71 ANSWERS
SEARCH TIME: 00.00.01

L9            71 SEA SSS FUL L1

=> s l9 and C9H8O2/mf
           595 C9H8O2/MF
L10          3 L9 AND C9H8O2/MF

=> d scan

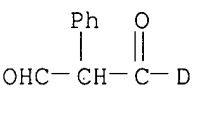
L10  3 ANSWERS   REGISTRY  COPYRIGHT 2005 ACS on STN
IN   Propanedial, phenyl- (9CI)
MF   C9 H8 O2
```



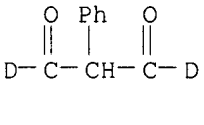
```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**


HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):2

L10  3 ANSWERS   REGISTRY  COPYRIGHT 2005 ACS on STN
IN   Propanedial-1-d, 2-phenyl- (9CI)
MF   C9 H7 D O2
```



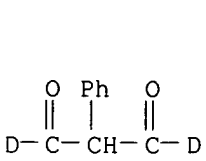
```
L10  3 ANSWERS   REGISTRY  COPYRIGHT 2005 ACS on STN
IN   Propanedial-1,3-d2, 2-phenyl- (9CI)
MF   C9 H6 D2 O2
```



```
ALL ANSWERS HAVE BEEN SCANNED

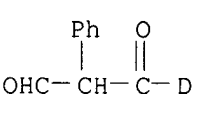

=> d tot

L10  ANSWER 1 OF 3  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   316189-59-0  REGISTRY
ED   Entered STN:  23 Jan 2001
CN   Propanedial-1,3-d2, 2-phenyl- (9CI)  (CA INDEX NAME)
MF   C9 H6 D2 O2
SR   CA
LC   STN Files:   CA, CAPLUS
```



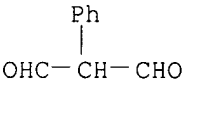
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 2 OF 3 REGISTRY COPYRIGHT 2005 ACS on STN
RN 316189-57-8 REGISTRY
ED Entered STN: 23 Jan 2001
CN Propanedial-1-d, 2-phenyl- (9CI) (CA INDEX NAME)
MF **C9 H7 D O2**
SR CA
LC STN Files: CA, CAPLUS



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L10 ANSWER 3 OF 3 REGISTRY COPYRIGHT 2005 ACS on STN
RN 26591-66-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN Malonaldehyde, phenyl- (6CI, 7CI, 8CI)
OTHER NAMES:
CN 2-Phenyl-1,3-propanedial
CN Phenylmalonaldehyde
FS 3D CONCORD
MF **C9 H8 O2**
LC STN Files: BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CSCHEM, IFICDB, IFIPAT, IFIUDB, TOXCENTER, USPATFULL
(*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

37 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
37 REFERENCES IN FILE CAPLUS (1907 TO DATE)
3 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

=> sel rn name 1-3 l10
E1 THROUGH E5 ASSIGNED

=> file caplus uspatfull caold beilstein

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	180.17	180.38

FILE 'CAPLUS' ENTERED AT 12:30:59 ON 27 DEC 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE 'USPATFULL' ENTERED AT 12:30:59 ON 27 DEC 2005

```
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CAOLD' ENTERED AT 12:30:59 ON 27 DEC 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'BEILSTEIN' ENTERED AT 12:30:59 ON 27 DEC 2005
COPYRIGHT (c) 2005 Beilstein-Institut zur Foerderung der Chemischen Wissenschaften
licensed to Beilstein GmbH and MDL Information Systems GmbH

=> s e1-5
L11          63 (PHENYLMALONALDEHYDE/BI OR "2-PHENYL-1,3-PROPANEDIAL"/BI OR
                26591-66-2/BI OR 316189-57-8/BI OR 316189-59-0/BI)

=> dup rem
ENTER L# LIST OR (END):l11
DUPLICATE IS NOT AVAILABLE IN 'CAOLD, BEILSTEIN'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L11
L12           60 DUP REM L11 (3 DUPLICATES REMOVED)

=> file caplus caold uspatfull
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                35.55     215.93

FILE 'CAPLUS' ENTERED AT 12:32:11 ON 27 DEC 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'CAOLD' ENTERED AT 12:32:11 ON 27 DEC 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATFULL' ENTERED AT 12:32:11 ON 27 DEC 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> s e1-5
L13          55 (PHENYLMALONALDEHYDE/BI OR "2-PHENYL-1,3-PROPANEDIAL"/BI OR
                26591-66-2/BI OR 316189-57-8/BI OR 316189-59-0/BI)

=> dup rem
ENTER L# LIST OR (END):l13
DUPLICATE IS NOT AVAILABLE IN 'CAOLD'.
ANSWERS FROM THESE FILES WILL BE CONSIDERED UNIQUE
PROCESSING COMPLETED FOR L13
L14           52 DUP REM L13 (3 DUPLICATES REMOVED)

=> d ibib abs hitstr l14 40-52

L14  ANSWER 40 OF 52  CAPLUS  COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER:         1976:523918  CAPLUS
DOCUMENT NUMBER:          85:123918
TITLE:                    Pyrazole derivatives
INVENTOR(S):              Moreau, Michele; Karadavidoff, Isaac; Stjerpanovic,
                          Milorad
PATENT ASSIGNEE(S):       Bottu S. A., Fr.
SOURCE:                   Ger. Offen., 15 pp.
                          CODEN: GWXXBX
DOCUMENT TYPE:            Patent
LANGUAGE:                 German
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     DE 2557514            A1    19760701    DE 1975-2557514         19751219
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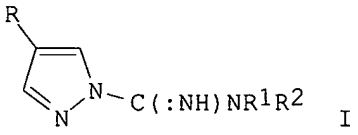
FR 2294699	A1	19760716	FR 1974-41963	19741219
JP 51125282	A2	19761101	JP 1975-150232	19751218
PRIORITY APPLN. INFO.:			FR 1974-41963 A	19741219

GI



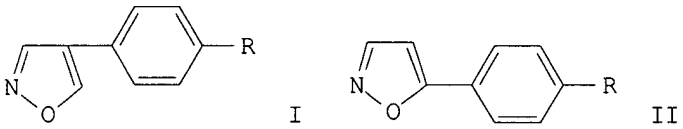
I

AB Pyrazolecarboxamidines (I; R = Cl, NO2, Ph; R1 = H, Me, Bu; R2 = H, Me, ClCH2CO, HCO, MeOCH2CO, F3CCO, EtOCO, MeCH:CHCH:CHCO) are prepared by different standard methods. Thus, reaction of H2NNHC(:NH)NH2.H2CO3 with O2NNaC(CHO)2.H2O in presence of concentrated HCl gives I.HCl (R = NO2; R1 = R2 = H). I are analgesics and inflammation inhibitors.

L14 ANSWER 41 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:	1977:405850 CAPLUS
DOCUMENT NUMBER:	87:5850
TITLE:	Preparation and reactivity of 4-phenylisoxazoles and their electrophilically substituted derivatives
AUTHOR(S):	De Munno, A.; Bertini, V.; Lucchesini, F.
CORPORATE SOURCE:	Fac. Sci., Univ. Pisa, Pisa, Italy
SOURCE:	Chimica e l'Industria (Milan, Italy) (1976), 58(12), 880-1 CODEN: CINMAB; ISSN: 0009-4315
DOCUMENT TYPE:	Journal
LANGUAGE:	Italian

GI



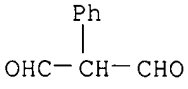
I II

AB 4-Phenylisoxazole (I, R = H) was obtained by Vilsmeier reaction of PhCH2CO2H with DMF and cyclization of Me2NC:CPhCHO with H2NOH. Alternatively, Me2NC:CPhCHO was hydrolyzed to NaCPh(CHO)2 and PhCH(CHO)2, which were also cyclized with H2NOH. Bromination of I (R = H) gave 98% I (R = Br), which was decomposed by NaOEt to 4-BrC6H4CH(CN)CHO. Nitration of I (R = H) gave I (R = NO2), which on decomposition with KOMe gave 4-O2NC6H4CH(CN)CHO K salt. Decomposition of II (R = NO2) with KOMe gave 4-O2NC6H4COCH2CN K salt. The rates of base decomposition of I and II (R = H, Br, NO2) were determined The decomposition took place by attack of the base on the H in the 3-position.

IT **26591-66-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation and cyclization with hydroxylamine)

RN 26591-66-2 CAPLUS

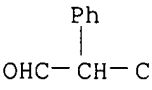
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 42 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:	1976:17218 CAPLUS
DOCUMENT NUMBER:	84:17218
TITLE:	Pyrazole series. I. Formation of

1,4-diphenylpyrazole and five- or six-member ring oligomeric derivatives
AUTHOR(S): Rull, Thomas; Le Strat, Georges; Escrivant, Michel; Landereethe, Robert
CORPORATE SOURCE: Cent. Rech. ATO Chim., Orsay, Fr.
SOURCE: Bulletin de la Societe Chimique de France (1975), (5-6, Pt. 2), 1371-4
CODEN: BSCFAS; ISSN: 0037-8968
DOCUMENT TYPE: Journal
LANGUAGE: French
OTHER SOURCE(S): CASREACT 84:17218
GI For diagram(s), see printed CA Issue.
AB 1,4-Diphenylpyrazole and pyrazoles I (X = p-C6H4, m-C6H4, p-C6H4OC6H4-p) were prepared by condensing PhCH(CHO)2 with PhNHNH2 or H2NNHXNHNH2. Reaction of Ac2CHCHAc2 with PhNHNH2 gave II, whereas with (p-H2NNHC6H4)2O a non-homogeneous low mol. weight polymer was obtained.
IT **26591-66-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with hydrazines)
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



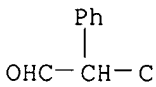
L14 ANSWER 43 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1974:520150 CAPLUS
DOCUMENT NUMBER: 81:120150
TITLE: Synthesis and reactions of 2-aryl-3-(dimethylamino)acroleins
AUTHOR(S): Coppola, Gary M.; Hardtmann, Goetz E.; Huegi, Bruno S.
CORPORATE SOURCE: Chem. Res. Dep., Sandoz-Wander, Inc., Hanover, NJ, USA
SOURCE: Journal of Heterocyclic Chemistry (1974), 11(1), 51-6
CODEN: JHTCAD; ISSN: 0022-152X
DOCUMENT TYPE: Journal
LANGUAGE: English
GI For diagram(s), see printed CA Issue.
AB The preparation of novel 2-aryl-3-(dimethylamino)acroleins I (R = NMe2, NHPh, piperidino, 4-methyl-1-piperazinyl; R1 = H,NO2; R2 = H,Cl, MeO; R3 = H, Cl, MeO; R4 = H, MeO; or aryl = 2-naphthyl or 6-methoxy-2-naphthyl) from arylacetic acids by a modified Vilsmeier-Haack reaction and their hydrolyses to 2-arylmalonaldehydes is described. Reactions of the acroleins with amines are discussed as well as the conversion of the 2-arylmalonaldehydes into 3-chloro and 3-alkoxyacroleins.

L14 ANSWER 44 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1974:404718 CAPLUS
DOCUMENT NUMBER: 81:4718
TITLE: Interaction of malonaldehyde with collagen. II. Reaction of collagen with certain malonaldehyde derivates
AUTHOR(S): Svadlenka, Ivan; Davidkova, Eva; Rosmus, Jan
CORPORATE SOURCE: Res. Inst. Food Ind., Czech. Acad. Agric., Prague, Czech.
SOURCE: Zeitschrift fuer Lebensmittel-Untersuchung und -Forschung (1973), 153(5), 312-15
CODEN: ZLUFAR; ISSN: 0044-3026
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The decrease in crosslinking properties of derivs. of malonaldehyde was due to the polar effect of substituents on the electron acceptor function of malonaldehyde. The crosslinking of collagen (I) fibers and acid-soluble I with nitromalonaldehyde [609-32-5], dimethylmalonaldehyde [1185-34-8], formylmalonaldehyde [18655-47-5], and **phenylmalonaldehyde** [**26591-66-2**] was examined and the results indicated that the

substitution decreased considerably the initial high reactivity of the parent compound The optimum conditions for the crosslinking reaction were .sim.pH 4.

IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(Crosslinking by, of collagen, pH effect on)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



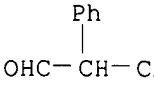
L14 ANSWER 45 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1971:488635 CAPLUS
DOCUMENT NUMBER: 75:88635
TITLE: Pharmacologically active 1-alkyl-4,5-diphenyl-or-4-(2'-thienyl)-5-phenyl-2(1H)-pyrimidinones
INVENTOR(S): Hardtmann, Goetz E.; Kathawala, Faizulla G.
PATENT ASSIGNEE(S): Sandoz Ltd.
SOURCE: Ger. Offen., 44 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 2056407	A	19710527	DE 1970-2056407	19701117
US 3772288	A	19731113	US 1970-88222	19701109
FR 2073390	A1	19711001	FR 1970-41337	19701118
FR 2077528	A5	19711029	FR 1970-41336	19701118
FR 2077528	B1	19740215		
NL 7016942	A	19710524	NL 1970-16942	19701119

PRIORITY APPLN. INFO.: US 1969-878572 A 19691120
GI For diagram(s), see printed CA Issue.
AB Title compds. (I), with tranquilizing, antiinflammatory, and analgesic activity (daily dose 120-2000 mg), were prepared Thus, Me2NCH:CPhCHO treated with MeNHCONH2 (II) and p-MeC6H4SO3H (III), or with aqueous (CO2H)2 followed by Cu(OAc)2, gave I (R = Me, R1 = H, R2 = Ph), which was converted with PhLi in THF into IV. BzCPh:CH2 was treated with MeNH2 at 30°, followed by KNCO and AcOH at 0°, to give V. MnO2 oxidation of IV and of V gave I (R = Me, R1 = R2 = Ph) (VI). BzCH2Ph (VII) reacted with HCO2Et and EtONa to give HOCPh:CPhCHO, which was heated with urea and AcNMe2 at 150-60° to give 5,6-diphenyl-2-pyrimidinol; this reacted with MeI or p-MeC6H4SO3Me in alkaline MeOH to give VI. VII was treated with DMF and POCl3 to give BzCPh:CHNMe2 which reacted with II and III to give VI. By one or more of the above methods, the following other I were prepared (R, R1, and R2 given): Et, Ph, Ph; iso-Pr, Ph, Ph; iso-Pr, p-C6H4Cl, Ph; iso-Pr, Ph, p-C6H4Cl; iso-Pr, Ph, m-C6H4Me; Me, Ph, 3,4-C6H3(OMe)2; iso-Pr, Ph, p-C6H4OMe; and iso-Pr, 2-thienyl, Ph.

IT **26591-66-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)

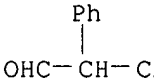


L14 ANSWER 46 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1963:12329 CAPLUS

DOCUMENT NUMBER: 58:12329
ORIGINAL REFERENCE NO.: 58:2040e-g
TITLE: Spectroscopic studies on enols. V. Spin coupling effects in the N.M.R. (nuclear magnetic resonance) spectra of hydroxymethylene and anilinomethylene compounds
AUTHOR(S): Forsen, Sture; Nilsson, Martin
CORPORATE SOURCE: Roy. Inst. Technol., Stockholm
SOURCE: Arkiv. Kemi (1962), 19, 569-76
DOCUMENT TYPE: Journal
LANGUAGE: English

AB cf. CA 57, 12417f. The N.M.R. spectra of phenylmalondialdehyde, 1-formyl-1-phenyl-2-propanone, Et 2-formyl-2-phenylacetate, diacetoacetaldehyde, its hydroxymethylene ketone form, and its formyl enol form, Et 2-acetyl-2-formylacetate, its hydroxymethylene ketone form, and its formyl enol form, 2-formylcyclohexanone, 2-formyl-5,5-dimethyl-1,3-cyclohexanedione, 3-anilinomethylene-2,4-pentanedione, 3-anilinomethylene-5,5-dimethyl-1,3-cyclohexanedione, 2-formyl-2-phenylacetonitrile, and 3-ethoxymethylene-2,4-pentanedione are reported. Spin coupling between the enolic and the aldehydic protons was observed in the hydroxymethylene forms; in the hydroxymethylene ketones the coupling constant (J) is .apprx.6 cycles/sec. and is temperature dependent; in the corresponding ester, J is 12.5 cycles/sec. The aldehydic protons in the hydroxymethylene compds. occur at higher fields (τ = 0.8-2.7) than those in ordinary aldehydes (τ = 0-0.7). For anilinomethylene diketones the enamino ketone form is preferred to the imino enol, both in the cyclic and the acyclic cases.

IT **26591-66-2**, Malonaldehyde, phenyl-
(nuclear magnetic resonance of)
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 47 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1960:109985 CAPLUS
DOCUMENT NUMBER: 54:109985
ORIGINAL REFERENCE NO.: 54:20870a-d
TITLE: Functional derivatives of malondialdehyde and their reactions. X. Acetals of malondialdehyde homologs
AUTHOR(S): Klimko, V. T.; Skoldinov, A. P.
SOURCE: Zhurnal Obshchei Khimii (1959), 29, 4027-9
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 54:109985

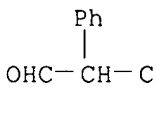
AB Adding 8.6 g. EtOCH:CHMe to 0.14 ml. BF3.Et2O in 29.6 g. HC(OEt)3, stirring 1 hr. at 45°, treating with 1 g. Na2CO3, and stirring 3 hrs. gave 53.4% 1,1,3,3-tetraethoxy-2-methylpropane (I), b5 87-7.5°, d20 0.9158, n20D 1.4151. This heated with N HCl 45 min. at 70°, the mixture adjusted to pH 8 with NaOH, evaporated in vacuo, taken up in absolute EtOH, and treated with C6H6 gave a precipitate of Na salt of methylmalondialdehyde, which with HCl-Et2O gave methylmalondialdehyde, m. 88-9° (after sublimation in vacuo). I heated 30 min. with PhNH2 in concentrated HCl and aqueous EtOH gave 73.3% methylmalondialdehyde dianil HCl salt, m. 223-4°; free dianil decomposed at 240-50°. HC(OMe)3 and MeOCH: CHMe as above gave 39.8% 1,1,3,3-tetramethoxy-2-methylpropane, b5 62-3°, 1.4090, 0.9652. Similarly were prepared: 64% 1,1,3,3-tetraethoxy-2-ethylpropane, b3 82-3°, 0.9097, 1.4179; 50% ethylmalondialdehyde, m. 72-3° (dianil HCl salt m. 212-13°); 68% 1,1,3,3-tetraethoxy-2-isopropylpropane, b2 80-1.5°, 0.9107, 1.4220; isopropylmalondialdehyde dianil HCl salt, m. 167-71°. Heating 1,1,3,3-tetraethoxy-2-isopropylpropane with aqueous HCl at 45° gave after addition of Cu(OAc)2, extraction with CHCl3, and treatment of the extracted product with aqueous H2SO4 46.5% isopropylmalondialdehyde, m. 62-3°.

Similarly were obtained: 43.9% 1,1,3,3-tetraethoxy-2-phenylpropane, b1.5-2 125-7°, 0.9826, 1.4715; phenylmalondialdehyde dianil HCl salt, m. 143-4°; phenylmalondialdehyde, 28%, m. 93.5-4.5° (Cu salt m. 214-15°).

IT **26591-66-2**, Malonaldehyde, phenyl-
(preparation of)

RN 26591-66-2 CAPLUS

CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 48 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1957:76787 CAPLUS

DOCUMENT NUMBER: 51:76787

ORIGINAL REFERENCE NO.: 51:13762a-d

TITLE: 1,1,1-Trifluoro-2,3-dione dioximes and related compounds

AUTHOR(S): Belcher, R.; Sykes, A.; Tatlow, J. C.

CORPORATE SOURCE: Univ. Birmingham, UK

SOURCE: Journal of the Chemical Society, Abstracts (1957) 2393-7
CODEN: JCSAAZ; ISSN: 0590-9791

DOCUMENT TYPE: Journal

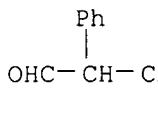
LANGUAGE: Unavailable

AB Br slowly added to EtCOCF3 (I) in concentrated H2SO4 at 15-20° and the mixture stirred 6 hrs. at 15-20° and 0.5 hr. at 60-70° gives MeCHBrCOCF3 (II), b. 92.5-3.5°, nD20 1.3792 (semicarbazone, m. 113-14°), whether 0.5 or 1 mole Br is used. Direct bromination of I or II in NaOAc-HOAc at 15-20° gives MeCBr2COCF3 (III), b. 124°, nD221.4302. III and NH2OH 3 hrs. at 100° give MeC(:NOH)C(:NOH)CF3 (IV), m. 89.5-90.5°. IV with Ni ions gives an insol. green 1:1 complex, difficult to purify, and a CHCl3-soluble, red, 2:1 complex (V). The form of IV which gives V is unstable to acids. Pd ions react like Ni. Heating IV with HCl gives the parent ketone which could not be isolated, but which with o-C6H4(NH2)2 yields 2-methyl-3-(trifluoromethyl)quinoxaline, m. 83-4°. I reacts slowly with SeO2 to give a heterogeneous liquid, from which some III is formed. CF3CO2H and MeMgI give 57% CF3Ac, brominated to CF3COCHBr2 (VI), b. 113°, nD16 1.4335 (disemicarbazone, decompose 208-10°; monosemicarbazone, decompose 134.5-5°). VI with NH2OH and NaOAc in H2O 90 min. at 100° yields CF3C(:NOH)CH:NOH, m. 117.5-19.5°, giving blood-red color with high concns. of Ni ion.

IT **26591-66-2**, Malonaldehyde, phenyl-
(preparation of)

RN 26591-66-2 CAPLUS

CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 49 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1957:76786 CAPLUS

DOCUMENT NUMBER: 51:76786

ORIGINAL REFERENCE NO.: 51:13761c-i,13762a

TITLE: Synthetic reactions of dimethylformamide. I. A general synthesis of β-dialdehydes

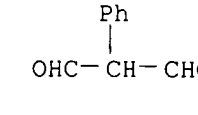
AUTHOR(S): Arnold, Zdenek; Sorm, Frantisek

CORPORATE SOURCE: Czech. Acad. Sci., Prague

SOURCE: Chemicke Listy pro Vedu a Prumysl (1957), 51, 1082-90
CODEN: CLPRAN; ISSN: 0366-6832

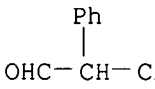
DOCUMENT TYPE: Journal

LANGUAGE: Unavailable
OTHER SOURCE(S): CASREACT 51:76786
AB Alkaline saponification of α-alkyl-β-(dimethylamino)acroleins (I) obtained from vinyl ethers, acetals, or α-chloro ethers with HCONMe2 and COCl2 give derivs. of CH2(CHO)2 and its homologs in 68-90% yields. COCl2 passed with cooling and stirring into 18.25 g. HCONMe2 in 40 mL. (CH2Cl)2 until the weight had increased 11 g., the solidified mixture diluted with 20 mL. (CH2Cl)2 and stirred, 0.1 mol di-Et acetal of the resp. aldehyde added, cooling discontinued, the spontaneously warmed mixture heated 15 min. to 70°, cooled, decomposed with 40 g. ice, 80 mL. saturated K2CO3 solution added dropwise with stirring (mixture A), the (CH2Cl)2 distilled on a boiling H2O bath, the mixture kept another 15 min. at 90-5°, cooled, extracted with three 25-mL. portions C6H6EtOH (2:1), the combined exts. evaporated in vacuo, and the product distilled and recrystd. from Et2O with deep cooling gave the following I of the type Me2NCH:CRCHO (R shown): H, b0.25 100°, m. -2°, 68.5% (77.5% from CH2:CHOEt) (picrate, m. 154.5-5.5°); Me, b0.2 90-100°, m. 39°, 81%; Et, b0.1 80°, m. 32°, 75%; Pr, b0.3 105°, m. 17.5°, 70%; iso-Pr, b0.3 90°, m. 20-1°, 48%; Bu, b0.1 100%, m. -8°, 60%; C5H11, b0.1 100-5°, m. 16.5°, 89%; Ph, b0.35 130%, m. 45-6°, 87%; PhCH2, b0.15 135°, m. 108.5-9.0°, 70%. The mixture A obtained by the procedure described extracted with EtOH-C6H6 (1:1), the extract evaporated in vacuo, and the residue diluted with dioxane gave the following crystalline quaternary salts (II) of the type [Me2NCH:CRCH:NMe2]Cl (R' shown), converted to the picrates by precipitation from aqueous solution: H, m. 188-90° (from pyridine), 35% (picrate, m. 141.5-2.5°); Me, m. 178-80° [from (CH2Cl)2], 20% (picrate, m. 127-8°); Et, m. 169.5-71.5° (from pyridine), 30% (picrate, m. 68-9°); C5H11 (picrate, m. 113.5-14.5°); Ph, m. 236° (from dioxane-MeOH), 26.5° (picrate, m. 114.5-15.5°) (all picrates from EtOH). Depending on the method of isolation, derivs. were prepared as follows. Passing a slow stream of COCl2 into 3.65 g. HCONMe2 until all solidified, adding dropwise 4.35 mL. PrCH(OEt)2, heating the mixture slowly to 75°, keeping 15 min. at 75°, decomposing with ice, and adding 8.2 g. AcONa and 12.5 mL. 4N PhNH2.HCl gave 4.7 g. crystalline precipitate of PhNHCH:CEtCH:NPh.HCl m. 206-7° (from EtOH). A similar procedure with MeCH(OEt)2 combined with precipitation of the product with 85% HClO4 gave 74% brown precipitate of Me2NCH:CHCH:NPh.HClO4, m. 158.5° (from EtOH). When 3.65 g. PrCH(OEt)2 was treated with excess COCl2 and the products worked up as described, the mother liquors after separation of II (R' = Et) yielded, on extraction with ligroine and distillation, 2 g. yellowish liquid, b13 102-5°, nD20 1.4753, apparently EtOCH:CEtCHO (III), besides 1.3 g. Me2C:CEtCHO. III shaken with 30% aqueous NHMe2 gave I (R = Et). III was also obtained in 1.3-g. yield by boiling 1.8 g. Na salt of EtCH(CHO)2 9 h. in 20 mL. EtOH with excess of EtBr. The I heated to 70° with 50% NaOH and the resulting solns. evaporated almost to dryness in vacuo gave in 90% yield Na salts of dialdehydes which were precipitated with EtOH-Me2CO, dried and converted to the following free R''CH(CHO)2 (R'' shown) by addition of N HCl in Et2O or 5N aqueous HCl with cooling and sublimation of the evaporation residue: H, m. 73-4°; Me, m. 88-9.5° (from C6H6); Et, m. 69-70°; Pr, m. 58.5°; iso-Pr, m. 62-3°; Bu, m. 54-5°; C5H11, m. 55°; Ph, m. 92-3°; PhCH2, m. 136-7° [from (CH2Cl)2]. Reaction mechanisms are discussed.
IT **26591-66-2**, Malonaldehyde, phenyl-
(preparation of)
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)

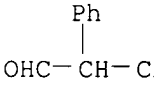


L14 ANSWER 50 OF 52 CAOLD COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: CA58:2040e CAOLD
TITLE: spectroscopic studies on enols - (V) spin coupling effects in the nuclear magnetic resonance spectra of

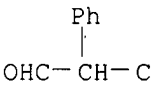
hydroxymethylene and anilinomethylene compds.
AUTHOR NAME: Forsen, Sture; Nilsson, M.
IT **26591-66-2**
RN 26591-66-2 CAOLD
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 51 OF 52 CAOLD COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: CA54:20870a CAOLD
TITLE: functional derivs. of malondialdehyde and their reactions - (X) acetals of malondialdehyde homologs
AUTHOR NAME: Klimko, V. T.; Skoldinov, A. P.
IT **26591-66-2**
RN 26591-66-2 CAOLD
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)

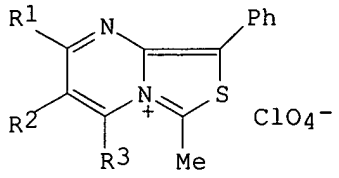


L14 ANSWER 52 OF 52 CAOLD COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: CA51:13762a CAOLD
TITLE: 1,1,1-trifluoro-2,3-dione dioximes and related compds.
AUTHOR NAME: Belcher, Ronald; Sykes, A.; Tatlow, J. C.
IT **26591-66-2**
RN 26591-66-2 CAOLD
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)

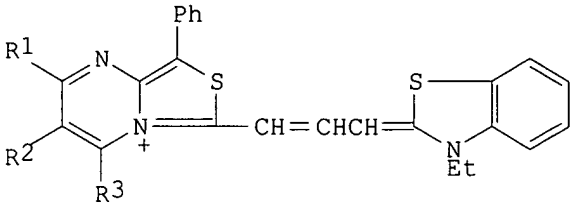


=> d ibib abs hitstr l14 30-39

L14 ANSWER 30 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1983:198137 CAPLUS
DOCUMENT NUMBER: 98:198137
TITLE: Condensed heterocycles with a thiazole nucleus. 3. 6-Methylthiazolo[3,4-a]pyrimidinium salts
AUTHOR(S): Mikitenko, E. K.; Romanov, N. N.
CORPORATE SOURCE: Inst. Org. Khim., Kiev, 252660, USSR
SOURCE: Khimiya Geterotsiklicheskikh Soedinenii (1983), (1), 42-5
CODEN: KGSSAQ; ISSN: 0453-8234
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI



I



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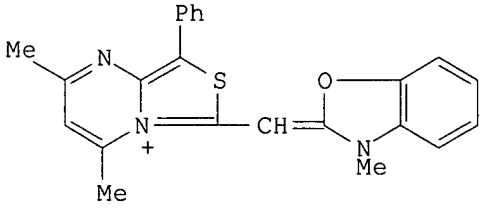


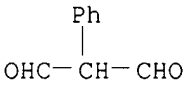
III

AB Cyclocondensation of MeC(S)NH2 and PhCH(CN)O3SPh with R1COCHR2COR3 (R1 = R3 = H, R2 = H, Ph; R1 = R3 = Me, R2 = H; R1 = Ph, R2 = H, R3 = Me, Ph) 10 min at 100-10° followed by addition of 72% HClO4 gave 28-34% perchlorates I which were treated with 3-ethyl-2-(2-acetanilidovinyl)benzothiazolium perchlorate to give 30-49% II. Addnl. obtained was 48% III.

IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation of, with thioacetamide and cyanobenzyl benzenesulfonate)

RN 26591-66-2 CAPLUS

CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 31 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1983:198089 CAPLUS

DOCUMENT NUMBER: 98:198089

TITLE: Synthesis of 2-substituted isothiazolopyridin-3-ones

AUTHOR(S): Baggaley, Keith H.; Jennings, L. John A.; Tyrrell, A. William R.

CORPORATE SOURCE: Biosci. Res. Cent., Beecham Pharm. Res. Div., Epsom/Surrey, KT18 5XQ, UK

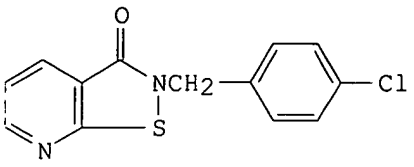
SOURCE: Journal of Heterocyclic Chemistry (1982), 19(6), 1393-6
CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 98:198089

GI



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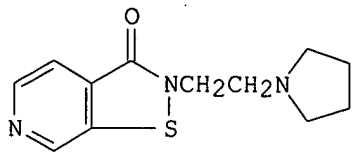

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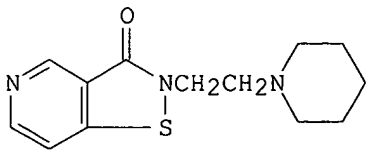
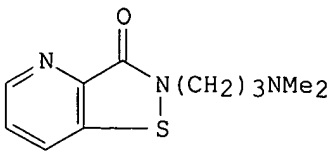
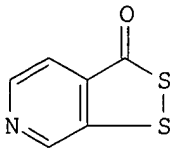


III



IV



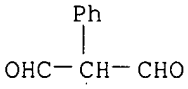
V

AB 2-Substituted derivs. of all four isomeric isothiazolopyridin-3-ones, e.g., I-IV, were prepared via 1,2-dithiolopyridin-3-ones, e.g. V, and 3-thiones.

IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclization of, with cyanothioacetamide)

RN 26591-66-2 CAPLUS

CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 32 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1982:217807 CAPLUS

DOCUMENT NUMBER: 96:217807

TITLE: 2-Oxo-1,3,2-dioxathianes. I. Preparation of the alkyl-substituted derivatives

AUTHOR(S): Virtanen, Terttu; Nikander, Hannu

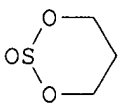
CORPORATE SOURCE: Dep. Chem. Biochem., Univ. Turku, Turku, SF-20500/50, Finland

SOURCE: Acta Chemica Scandinavica, Series B: Organic Chemistry and Biochemistry (1982), B36(2), 113-16
CODEN: ACBOCV; ISSN: 0302-4369

DOCUMENT TYPE: Journal

LANGUAGE: English

GI



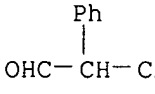
I

AB 2-Oxo-1,3,2-dioxathiane (I), all methyl- and several other alkyl-substituted 2-oxo-1,3,2-dioxathianes were synthesized by condensing 1,3-alkanediols and SOCl2. The amount of the S:O axial and S:O equatorial isomers can be controlled by adding pyridine to the reaction mixture

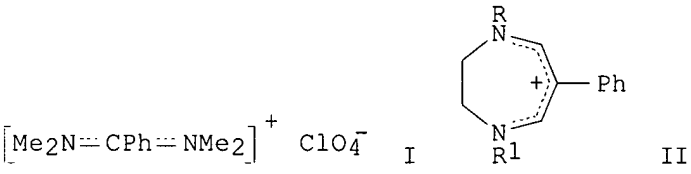
IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reduction of)

RN 26591-66-2 CAPLUS

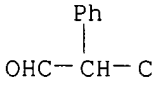
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 33 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1981:425009 CAPLUS
DOCUMENT NUMBER: 95:25009
TITLE: Diazepines. Part 25. Preparation and properties of 6-aryl-2,3-dihydro-1,4-diazepinium salts. Electronic interaction between the rings and steric inhibition thereof
AUTHOR(S): Lloyd, Douglas; Tucker, Kanwaljit S.; Marshall, Donald R.
CORPORATE SOURCE: Dep. Chem., Univ. St. Andrews, St. Andrews, KY16 9ST, UK
SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1981), (3), 726-35
CODEN: JCPRB4; ISSN: 0300-922X
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 95:25009
GI



AB A number of 6-aryldihydrodiazepinium salts were prepared by treating 1,2-diamines with 3-aryl-1,5-diazapentadienium salts. E.g., the pentadienium salt I, prepared by Vilsmeier reaction of PhCH2CO2H, HCONMe2, and POCl3, reacted with RNH(CH2)2NHR1 [R = R1 = H, Me, CH2Ph; R = H, R1 = Me; RR1 = (CH2)4] to give the corresponding diazepines II in 74-89% yields. The electron-rich dihydrodiazepinium cation activated the 6-aryl substituent towards electrophilic attack, halogenation and nitration occurring at the p-position. Substituents vicinal to the ring junction inhibited the electrophilic substitution; 13C NMR spectra of these vicinally substituted compds. showed a lowering of the electronic interaction between the rings. N,N'-Diphenyl and -dibenzyl substituents also inhibited electrophilic substitution in the 6-Ph ring.
IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with dianilinoethane)
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 34 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1979:523667 CAPLUS
DOCUMENT NUMBER: 91:123667
TITLE: Synthesis of 1H-pyrazolo[3,4-b]pyridines and of

pyrazolo[1,5-a]pyrimidines

AUTHOR(S): Van Haverbeke, Y.; Maquestiau, A.; Vanden Eynde, J. J.

CORPORATE SOURCE: Serv. Chim. Org., Univ. Etat Mons, Mons, 7000, Belg.

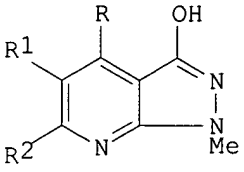
SOURCE: Journal of Heterocyclic Chemistry (1979), 16(4), 773-7
CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal

LANGUAGE: French

OTHER SOURCE(S): CASREACT 91:123667

GI



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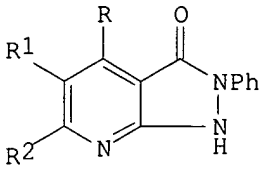

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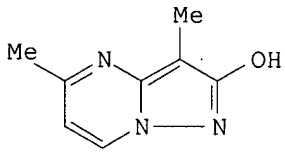


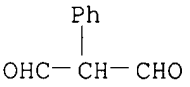
III

AB The reaction between 1-methyl-5-amino-1,2-dihydro-3H-pyrazol-3-one and 2-phenyl-5-amino-2,4-dihydro-3H-pyrazol-3-one with β-dicarbonyl compound gave the pyrazolopyridines I and II (R = H, Me, Ph, CO2Me, CF3, Ph, CO2Et; R1 = H, Ph, Me; R2 = H, Me, Ph, OH), resp. Pyrazolopyrimidines, e.g. III, were similarly prepared The orientation of the cyclocondensation is dependent on the nature of each precursor.

IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclization of, with aminomethylpyrazolone, pyrazolopyridine derivative from)

RN 26591-66-2 CAPLUS

CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 35 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1979:420441 CAPLUS

DOCUMENT NUMBER: 91:20441

TITLE: Pyrimidones. 1. Synthesis of some 1-substituted-5-aryl- and (4,5-diaryl)-2-(1H) pyrimidones

AUTHOR(S): Coppola, Gary M.; Fraser, James D.; Hardtmann, Goetz E.; Huegi, Bruno S.; Kathawala, Faizulla G.

CORPORATE SOURCE: Pharm. Div., Sandoz, Inc., East Hanover, NJ, 07936, USA

SOURCE: Journal of Heterocyclic Chemistry (1979), 16(3), 545-54
CODEN: JHTCAD; ISSN: 0022-152X

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 91:20441

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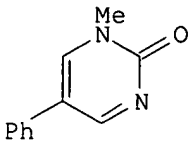


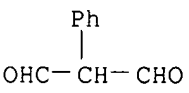
I

AB A series of 1-substituted 5-aryl-2(1H)-pyrimidones, e.g. I, were prepared by condensation of an appropriate N-substituted urea with either 2-aryl-3-(dimethylamino)acroleins or 2-arylmalondialdehydes. Several compds. exhibited some antiinflammatory activity.

IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclization of, with ureas, pyrimidinones from)

RN 26591-66-2 CAPLUS

CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 36 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1978:22813 CAPLUS

DOCUMENT NUMBER: 88:22813

TITLE: Studies of 2-oxo- and 2-thioxo-1,2-dihydropyrimidinium salts

AUTHOR(S): Lloyd, Douglas; McNab, Hamish; Tucker, Kanwaljit S.

CORPORATE SOURCE: Dep. Chem., Univ. St. Andrews, St. Andrews, UK

SOURCE: Journal of the Chemical Society, Perkin Transactions 1: Organic and Bio-Organic Chemistry (1972-1999) (1977), (16), 1862-9
CODEN: JCPRB4; ISSN: 0300-922X

DOCUMENT TYPE: Journal

LANGUAGE: English

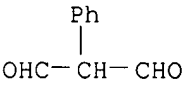
OTHER SOURCE(S): CASREACT 88:22813

AB The deuteration, halogenation, diazo coupling, reaction with nucleophiles, UV, mass, 1H, and 13C NMR spectra of 2-oxo- and 2-thioxo-1,2-dihydropyrimidinium salts were compared with those of 2,2-dialkyl-1,2-dihydropyrimidinium and 2,3-dihydro-1,4-diazepinium salts to demonstrate the effect of an adjacent oxo or thioxo group on the properties of a 1,5-diazopentadienium system.

IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of with dimethylurea and -thiourea)

RN 26591-66-2 CAPLUS

CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 37 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1977:583658 CAPLUS

DOCUMENT NUMBER: 87:183658

TITLE: On the base catalyzed ring opening of 3-unsubstituted isoxazoles. Derivatives of 4- and 5-phenylisoxazole

AUTHOR(S): De Munno, Angela; Bertini, Vincenzo; Lucchesini, Francesco

CORPORATE SOURCE: Ist. Chim. Org., Fac. Sci. MFN, Pisa, Italy

SOURCE: Journal of the Chemical Society, Perkin Transactions 2: Physical Organic Chemistry (1972-1999) (1977), (9), 1121-4
CODEN: JCPKBH; ISSN: 0300-9580

DOCUMENT TYPE: Journal
LANGUAGE: English
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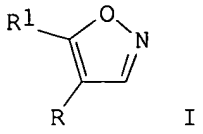
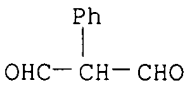


I

AB The kinetics of the base-induced decomposition of the isoxazoles I (R = Ph, p-BrC6H4, p-O2NC6H4, R1 = H; R = H, R1 = Ph, p-BrC6H4, p-O2NC6H4) to RC(CN):C(O-)R1 were studied. The primary D isotope effect kH/kD for I (R = H, R1 = Ph) was 3.1. The mechanism of the reaction is a one-stage concerted abstraction of H-3 and scission of the N-O bond. I (R = Ph, R1 = H) was prepared from PhC(CHO):CHNMe2 by cyclization with NH2OH or by sequential conversion to PhC(CHO):CHONa and PhCH(CHO)2 followed by cyclization with NH2OH.

IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation of, with hydroxylamine)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 38 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1978:24241 CAPLUS
DOCUMENT NUMBER: 88:24241
TITLE: Studies in the Vilsmeier-Haack reaction: Part XVI. Synthesis of 7-amino-3-hetrarylquinoline fluorophore and derivatives
AUTHOR(S): Naik, H. A.; Seshadri, S.
CORPORATE SOURCE: Dep. Chem. Technol., Univ. Bombay, Bombay, India
SOURCE: Indian Journal of Chemistry, Section B: Organic Chemistry Including Medicinal Chemistry (1977), 15B(6), 506-8
CODEN: IJSBDB; ISSN: 0376-4699
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 88:24241
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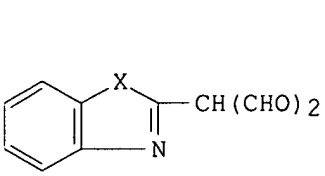

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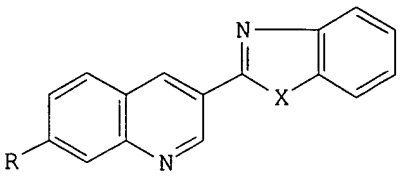

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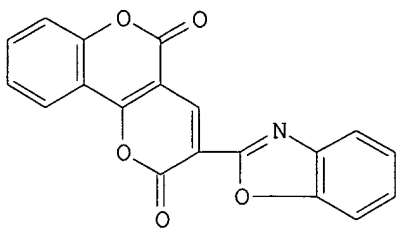


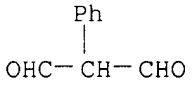
IV

AB Refluxing malonaldehydes I (X = O, NH, S) with m-C6H4(NH2)2 [108-45-2] in HOAc-MeC6H4SO3H gave a new fluorescent system (II; R = NH2; X = O, NH, S); similar reaction of I(x = O) [39116-24-0] with m-H2NC6H4OH [591-27-5] gave II (R = OH, X = O) [64887-43-0]. II[R = 2H-naphtho[1,2-d]triazol-2-yl (Q); X = O, NH] and II [R = 4-amino-6-[(2-hydroxyethyl)amino]-s-triazin-2-ylamino; X = O, NH] were prepared from II (R = NH2; X = O, NH) by known methods. The com. fluorescent whitener 3-(2-benzoxazolyl)-7-hydroxycoumarin [64887-40-7] was obtained by 2-step reaction of 2-(2-benzoxazolyl)cyanoacetaldehyde (III) [39116-38-6] with resorcinol [108-46-3]; similarly, 4-hydroxycoumarin [1076-38-6] and III gave weakly fluorescent IV [64887-41-8]. Of the quinoline derivs. prepared, only II(R = Q, X = O) [64887-44-1] showed a useful whitening effect on Terylene fabrics.

IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with phenylenediamine, quinoline derivative from)

RN 26591-66-2 CAPLUS

CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 39 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1977:189017 CAPLUS

DOCUMENT NUMBER: 86:189017

TITLE: The crystal structure of phenylmalondialdehyde at -162°C

AUTHOR(S): Semmingsen, Dag

CORPORATE SOURCE: Dep. Chem., Univ. Oslo, Oslo, Norway

SOURCE: Acta Chemica Scandinavica, Series B: Organic Chemistry and Biochemistry (1977), B31(2), 114-18
CODEN: ACBOCV; ISSN: 0302-4369

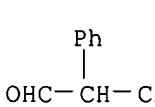
DOCUMENT TYPE: Journal

LANGUAGE: English

AB The crystal structure of 2-phenylmalondialdehyde was determined at -162°. The crystals were orthorhombic with space group Pna21, cell dimensions a = 7.523(2), b = 17.165(3), c = 5.552(2) Å, and 4 mols. in the unit cell. The structure was solved by direct methods and refined by the full-matrix least-squares methods to R = 0.032. The compound crystallized in the trans-enol form. The crystal packing consisted of asym. H-bonded chains of mols. in a pseudo Pnab cell. The polar axis of the space group may therefore be reversible and the crystals may show ferroelectric properties.

IT **26591-66-2**
RL: PRP (Properties)
(crystal structure and conformation of)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



=> d ibib abs hitstr l14 20-29

L14 ANSWER 20 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:42371 CAPLUS
DOCUMENT NUMBER: 128:115388
TITLE: Preparation of oligomeric and polymeric liquid crystalline materials and intermediates containing coordinated transition metal in the mesogenic side chain
INVENTOR(S): Styring, Peter; Saez, Isabel; Gough, Neil; Sinn, Ekkehark; Goodby, John William
PATENT ASSIGNEE(S): Secretary of State for Defence, UK; Styring, Peter; Saez, Isabel; Gough, Neil; Sinn, Ekkehark; Goodby, John William
SOURCE: PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9749671	A1	19971231	WO 1997-GB1584		19970612
W: GB, JP, US					
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
GB 2328944	A1	19990310	GB 1998-25824		19970612
GB 2328944	B2	20001122			
EP 927155	A1	19990707	EP 1997-926100		19970612
EP 927155	B1	20021120			
R: DE, FR, GB, NL					
JP 2000512984	T2	20001003	JP 1998-502479		19970612
US 6184322	B1	20010206	US 1998-194778		19981203
PRIORITY APPLN. INFO.:			GB 1996-13068	A	19960621
			WO 1997-GB1584	W	19970612

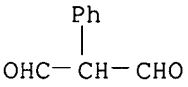
OTHER SOURCE(S): MARPAT 128:115388
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A group of liquid crystalline compds. (I) and (II) [R1 = CkH2k+1, CkF2k+1, polyether residue, a chiral functionality; k undefined; R2 = H, F, Me; R3 = alk(en)yl, alkynyl, OH, oxiranyl, etc.; X, Y = O2C, CO2, CO, O, S, etc.; Z = (chiral) alkyl, alkyl, etc.; m = 0, 1; n = 0-2; M = transition metal] including polymers, monomers, oligomers and intermediates are prepared and claimed. Also included are sym. and non-sym. poly(dimethylsiloxy) compds. having end groups derived from I and II. I and II are useful in display technol., thin-film magnetic materials, e.g., for data storage, in lubricants, and anisotropically supported catalysts. For example, a title polymer was prepared by heating the methacrylate ester of a Ni-complex III (multistep preparation given) for 48 h at 70° with AIBN in THF under N.

IT **26591-66-2, Phenylmalonaldehyde**
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation with ethanediamine and (tetrahydropyranyloxyundecyloxy)benzaldehyde; preparation of oligomeric and polymeric liquid crystalline materials and intermediates containing coordinated transition metal in the mesogenic

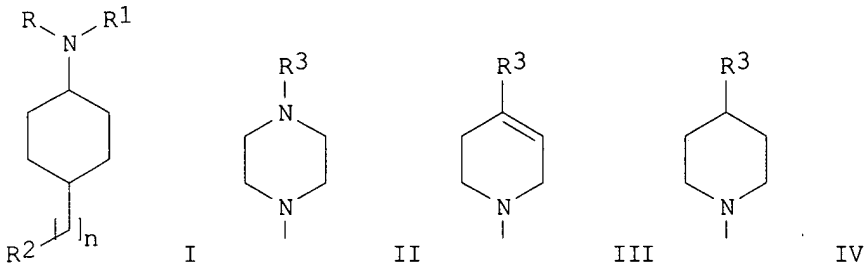
side chain)
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



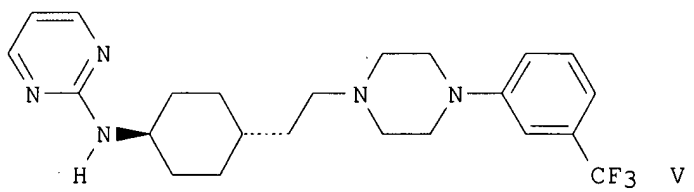
L14 ANSWER 21 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:321401 CAPLUS
DOCUMENT NUMBER: 126:293365
TITLE: Preparation of heteroaryl-substituted cyclohexylamines as central nervous system (CNS) agents
INVENTOR(S): Belliotti, Thomas R.; Kesten, Suzanne R.; Pugsley, Thomas A.; Wustrow, David J.
PATENT ASSIGNEE(S): Warner-Lambert Company, USA
SOURCE: PCT Int. Appl., 61 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9711070	A1	19970327	WO 1996-US13687		19960823
W: AU, BG, CA, CN, CZ, EE, GE, HU, IL, IS, JP, KR, LK, LR, LT, LV, MG, MX, NO, NZ, PL, RO, SG, SI, SK, UA, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
AU 9668590	A1	19970409	AU 1996-68590		19960823
ZA 9607944	A	19970402	ZA 1996-7944		19960919
US 5977110	A	19991102	US 1998-43331		19980320
PRIORITY APPLN. INFO.:			US 1995-4193P	P	19950922
			WO 1996-US13687	W	19960823

OTHER SOURCE(S): MARPAT 126:293365
GI



I II III IV



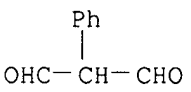
V

AB The title compds. [I; R = heteroaryl; R1 = H, lower alkyl, cycloalkyl, aryl, PhCH2; n = 1-2; R2 = II, III, IV (wherein R3 = (un)substituted 2-pyrimidinyl, 2-, 3- or 4-pyridinyl, 2- or 3-thienyl, etc.)], useful as CNS agents, and particularly useful as dopaminergic, serotonergic,

antipsychotic, and anxiolytic agents, and for treatment of schizophrenia, were prepared Thus, reaction of trans-(4-aminocyclohexyl)acetic acid Et ester with 2-chloropyrimidine in the presence of Et3N in EtOH followed by reduction of the resulting trans-[4-(pyrimidin-2-ylamino)cyclohexyl]acetic acid Et ester with LiAlH4 in THF, treatment of trans-[4-(pyrimidin-2-ylamino)cyclohexyl]ethanol with CBr4 in the presence of polymer-supported Ph3P in CH2Cl2, and reaction of trans-[4-(2-bromoethyl)cyclohexyl]pyrimidin-2-ylamine with 1-(3-trifluoromethylphenyl)piperazine in the presence of K2CO3 in MeCN afforded trans-V which showed Ki of 6 nM against [3H]N-0437 binding to h-D2 receptors.

IT **26591-66-2, Phenylmalonaldehyde**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of heteroaryl-substituted cyclohexylamines as central nervous system (CNS) agents)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 22 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:487503 CAPLUS
TITLE: Structures of copper complexes of 2-phenyldialdehydes and related compounds. Relation of inter-plane angle to mesogenic and other properties.
AUTHOR(S): Chipperfield, John R.; Clark, Stephen; Sinn, Ekkehard
CORPORATE SOURCE: Department Chemistry, University Hull, Kingston upon Hull, HU6 7RX, UK
SOURCE: Book of Abstracts, 214th ACS National Meeting, Las Vegas, NV, September 7-11 (1997), INOR-096. American Chemical Society: Washington, D. C.
CODEN: 64RNAO
DOCUMENT TYPE: Conference; Meeting Abstract
LANGUAGE: English

AB The crystal and mol. structures of a series of ring-substituted 2-phenylmalondialdehyde complexes of copper(II) are reported. The relationship between structure, mol. packing, interplane angles and m.ps. are discussed. The results are correlated with the mesophase properties of the analogous 4-alkoxy-substituted **phenylmalonaldehyde** complexes.

L14 ANSWER 23 OF 52 USPATFULL on STN
ACCESSION NUMBER: 96:72894 USPATFULL
TITLE: 4-bicyclically substituted dihydropyridines and their use in medicaments
INVENTOR(S): Straub, Alexander, Wuppertal, Germany, Federal Republic of
Goldmann, Siegfried, Wuppertal, Germany, Federal Republic of
Stoltefuss, J urgen, Haan, Germany, Federal Republic of
Bechem, Martin, Wuppertal, Germany, Federal Republic of
Dembowsky, Klaus, Wuppertal, Germany, Federal Republic of
Gross, Rainer, Wuppertal, Germany, Federal Republic of
Hebisch, Siegbert, Bottrop, Germany, Federal Republic of
H utter, Joachim, Wuppertal, Germany, Federal Republic of
Rounding, Howard-Paul, Wuppertal, Germany, Federal Republic of
PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5545646		19960813

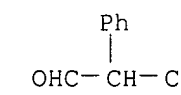
APPLICATION INFO.: US 1994-261585 19940617 (8)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1993-4321030	19930624

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Fan, Jane
LEGAL REPRESENTATIVE: Sprung, Horn, Kramer & Woods
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: 1
LINE COUNT: 1680
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to new 4-bicyclically substituted dihydropyridines of the general formula (I) ##STR1## in which R.sub.1 to R.sub.5 have the meaning given in the description, processes for their preparation and their use in medicaments, in particular in agents for the treatment of cardiovascular diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 24 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1994:604691 CAPLUS
DOCUMENT NUMBER: 121:204691
TITLE: Anomalous pressure effects on the Raman spectra in hydrogen-bonded molecular chain systems
AUTHOR(S): Moritomo, Y.; Tokura, Y.; Mochida, T.; Sugawara, T.; Oohashi, T.; Kojima, T.; Istubo, A.
CORPORATE SOURCE: Department Physics, University Tokyo, Tokyo, 113, Japan
SOURCE: Journal of Chemical Physics (1994), 101(3), 1813-19
CODEN: JCPSA6; ISSN: 0021-9606
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Effects of hydrostatic pressure on the Raman spectra have been investigated for four kinds of 1,3-diketone crystals with hydrogen-bonded mol. chains. In all the crystals the authors studied, intense CO stretching Raman mode shows pressure-induced softening reflecting compression of the hydrogen bonds. Furthermore, application of pressure broadens the both C:O and C-O stretching modes and intensifies several specific vibrational bands. The authors ascribed these spectral changes to formation or growth of the kink-type defects of the hydrogen-bonded sequence.
IT **26591-66-2, Phenylmalonaldehyde**
RL: PRP (Properties)
(Raman spectra of hydrogen-bonded mol. chains of, pressure effects on)
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)

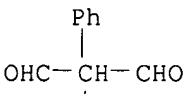


L14 ANSWER 25 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1992:457868 CAPLUS
DOCUMENT NUMBER: 117:57868
TITLE: Anomalous pressure effects on optical spectra of hydrogen-bonded molecular chain solids: possible formation of kink solitons
AUTHOR(S): Moritomo, Y.; Tokura, Y.; Oohashi, T.; Kojima, T.; Itsubo, A.
CORPORATE SOURCE: Dep. Phys., Univ. Tokyo, Tokyo, 113, Japan
SOURCE: Journal of Chemical Physics (1992), 96(11), 8507-13
CODEN: JCPSA6; ISSN: 0021-9606
DOCUMENT TYPE: Journal
LANGUAGE: English
AB IR and visible absorbance spectra were measured as a function of

hydrostatic pressure for five kinds of organic crystals composed of hydrogen-bonded mol. chains. An unconventional vibrational band is observed in the IR spectra around 1800 cm-1 commonly in these compds. and its intensity rapidly increases with pressure. The observed band is ascribed to a proton vibration localized around kink-type defects or solitons in the hydrogen-bonded mol. chains. In accordance with the pressure-induced growth of the IR band, a new electronic absorption band appears in the visible region below the ordinary mol. excitation, suggesting a change in the electronic structures within the mols. around the soliton.

IT **26591-66-2**
RL: PRP (Properties)
(optical spectra of hydrogen-bonded, anomalous pressure effects on, kink soliton formation in relation to)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)

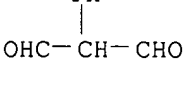


L14 ANSWER 26 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1992:499946 CAPLUS
DOCUMENT NUMBER: 117:99946
TITLE: Raman and IR studies of proton-related dynamics in π-molecular crystals
AUTHOR(S): Moritomo, Yutaka; Tokura, Yoshinori; Oohashi, Toyoshi; Kojima, Takashi; Itsubo, Akira
CORPORATE SOURCE: Dep. Phys., Univ. Tokyo, Tokyo, 113, Japan
SOURCE: Molecular Crystals and Liquid Crystals Science and Technology, Section A: Molecular Crystals and Liquid Crystals (1992), 216, 223-8
CODEN: MCLCE9; ISSN: 1058-725X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB IR spectra and Raman scattering were measured as a function of pressure for mol. crystals of several 1,3-diketones, which are composed of hydrogen-bonded π-mol. chains. An unconventional proton-related band is commonly observed in the IR spectra around 1800-2000 cm-1 in these compds. The observed band was ascribed to proton vibration localized around kink (or antikink-) solitons. The intensity of the band rapidly increases with application of hydrostatic pressure, suggesting increase in number of the solitons-like defects of the mol. chains via deformation of the double-well type proton potential.

IT **26591-66-2**
RL: PRP (Properties)
(IR and Raman spectra of, proton-related dynamics in, pressure in relation to)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



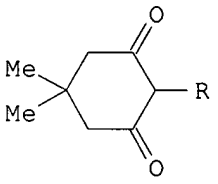
L14 ANSWER 27 OF 52 USPATFULL on STN
ACCESSION NUMBER: 91:1312 USPATFULL
TITLE: Conversion of diethyl phenylmalonate to 2-phenyl-1,3-propanediol
INVENTOR(S): Choi, Young M., Plainsboro, NJ, United States
PATENT ASSIGNEE(S): Carter-Wallace, Inc., New York, NY, United States (U.S. corporation)

NUMBER	KIND	DATE

PATENT INFORMATION: US 4982016 19910101
APPLICATION INFO.: US 1989-361888 19890606 (7)
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Lone, Werren B.
LEGAL REPRESENTATIVE: Clarke, Kevin B.
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1
LINE COUNT: 206
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Synthesis of 2-phenyl-1,3-propanediol by the selective reduction of diethyl phenylmalonate with metal hydrides in solution with heterocyclic ethers are disclosed.

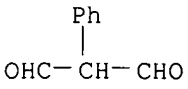
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 28 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1986:50487 CAPLUS
DOCUMENT NUMBER: 104:50487
TITLE: Acid-base properties of substituted 5,5-dimethyl-1,3-cyclohexanediones and structure of the anions
AUTHOR(S): Kampar, V.; Zarins, J.; Calmane, L.; Neiland, O.; Bruvers, Z.
CORPORATE SOURCE: Rizh. Politekh. Inst., Riga, USSR
SOURCE: Zhurnal Obshchei Khimii (1985), 55(6), 1428-32
CODEN: ZOKHA4; ISSN: 0044-460X
DOCUMENT TYPE: Journal
LANGUAGE: Russian
GI



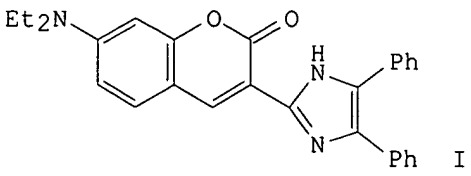
I

AB The pKa values of the title compds. [I; R = H, (un)substituted phenyl] were determined along with the electronic spectra of the enol forms and anions. CNDO/S calcns. on some I anions and model compds. were also carried out. The anomalously high acidity of I (R = H), compared to that of its aryl derivs., was attributed to the more efficient solvation of the I (R = H) anion.
IT **26591-66-2**
RL: PRP (Properties)
(electron configuration of)
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 29 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1986:20725 CAPLUS
DOCUMENT NUMBER: 104:20725
TITLE: Pyrimidyl and imidazolyl coumarin disperse dyes
AUTHOR(S): Padmanabhan, S.; Seshadri, S.
CORPORATE SOURCE: Dep. Chem. Technol., Univ. Bombay, Bombay, 400 019, India
SOURCE: Dyes and Pigments (1985), 6(6), 397-403
CODEN: DYPIDX; ISSN: 0143-7208

DOCUMENT TYPE: Journal
LANGUAGE: English
GI



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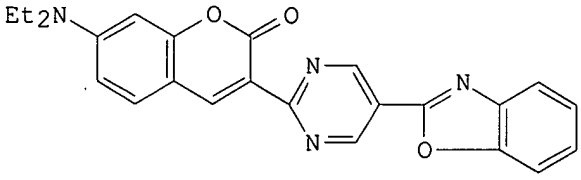
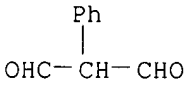


II

AB The synthesis of six 7-(diethylamino)coumarin derivs. containing pyrimidine and imidazole substituents at the 3-position was described. The best disperse dyeing on polyester was shown by greenish yellow I [99626-81-0] and II [99626-82-1]. The dyes were prepared by cyclocondensation of 7-(diethylamino)coumarin-3-amidine acetate [58764-27-5] with benzoin [119-53-9] or the appropriate malondialdehyde derivative

IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(cyclocondensation of, with diethylaminocoumarinamidine acetate)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	188.47	404.40

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-20.44	-20.44

FILE 'STNGUIDE' ENTERED AT 12:41:26 ON 27 DEC 2005

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Dec 23, 2005 (20051223/UP).

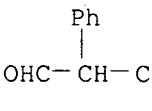
=> d ibib abs hitstr l14 10-19
YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS, CAOLD, USPATFULL' - CONTINUE? (Y)/N:y

L14 ANSWER 10 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:707180 CAPLUS
DOCUMENT NUMBER: 135:257162
TITLE: Process for preparing pyridine derivatives
INVENTOR(S): Suda, Hirokazu; Kaibara, Ken

PATENT ASSIGNEE(S): Sankyo Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2001261647	A2	20010926	JP 2000-80593	20000322

PRIORITY APPLN. INFO.: JP 2000-80593 20000322
OTHER SOURCE(S): CASREACT 135:257162; MARPAT 135:257162
AB Pyridine derivs., useful as intermediates for pharmaceuticals, agrochems., dyes, electrophotog. agents, etc, are prepared by reaction of acetyl compds. with dialdehydes OHCCHRCHO [R = (un)substituted alkyl, etc.] (or monoacetal or diacetal compds. thereof), followed by reaction of the products with ammonia or an ammonium salt. Thus, reaction of 4-acetylpyridine with OHCCHClCHO in THF containing potassium tert-butoxide, followed by treatment with ammonium acetate in acetic acid, gave 5-chloro-2-(4-pyridyl)pyridine in 81% yield.
IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(process for preparing pyridine derivs.)
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 11 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2001:18568 USPATFULL
TITLE: Metal-containing side chain liquid crystal polymers
INVENTOR(S): Styring, Peter, Hull, United Kingdom
Saez, Isabel M., Hull, United Kingdom
Gough, Neil, Hull, United Kingdom
Sinn, Ekkehard, Hull, United Kingdom
Goodby, John W, Hull, United Kingdom
PATENT ASSIGNEE(S): The Secretary of State for Defence in Her Britannic Majesty's Government of the United Kingdom of Great Britain and Northern Ireland, Farnborough, United Kingdom (non-U.S. government)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6184322	B1	20010206	
	WO 9749671		19971231	
APPLICATION INFO.:	US 1998-194778		19981203	(9)
	WO 1997-GB1584		19970612	
			19981203	PCT 371 date
			19981203	PCT 102(e) date

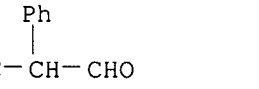
	NUMBER	DATE
PRIORITY INFORMATION:	GB 1996-13068	19960621

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Wu, Shean C.
LEGAL REPRESENTATIVE: Nixon & Vanderhye
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 7
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1145
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A group fo liquid crystalline compounds defined by formulas (1) and (2)
##STR1##

including polymers, monomers, oligomers and intermediates for their preparation. Also included are symmetric and non-symmetric poly(dimethylsiloxy) compounds having end groups derived from Formulas (1) and (2).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 12 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:667333 CAPLUS
DOCUMENT NUMBER: 136:79252
TITLE: 2-Arylpyrazolo[1,5-a]pyrimidin-3-yl acetamides. New potent and selective peripheral benzodiazepine receptor ligands
AUTHOR(S): Selleri, S.; Bruni, F.; Costagli, C.; Costanzo, A.; Guerrini, G.; Ciciani, G.; Costa, B.; Martini, C.
CORPORATE SOURCE: Dipartimento di Scienze Farmaceutiche, Universita di Firenze, Florence, 50121, Italy
SOURCE: Bioorganic & Medicinal Chemistry (2001), 9(10), 2661-2671
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 136:79252
AB A new class of N,N-diethyl-(2-arylpyrazolo[1,5-a]pyrimidin-3-yl)acetamides, as azaisosters of Alpidem, was prepared following a novel synthetic method and their affinities for both the peripheral (PBR) and the central (CBR) benzodiazepine receptors were evaluated. Binding assays were carried out using both [3H]PK 11195 and [3H]Ro 5-4864 as radioligands for PBR, whereas [3H]Ro 15-1788 was used for CBR, in rat kidney and rat cortex, resp. The tested compds. exhibited a broad range of binding affinities from as low as 0.76 nM to inactivity and most of them proved to be high selective ligands for PBR. The preliminary SAR studies suggested some of the structural features required for high affinity and selectivity; particularly the substituents on the pyrimidine moiety seemed to play an important role in PBR vs. CBR selectivity. A subset of the highest affinity compds. was also tested for their ability to stimulate steroid biosynthesis in C6 glioma rat cells and some of these were found to increase pregnenolone formation with potency similar to Ro 5-4864 and PK 11195.
IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of arylpyrazolopyrimidinyl acetamides as selective peripheral benzodiazepine receptor ligands: effect on steroid biosynthesis)
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

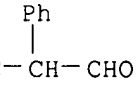
L14 ANSWER 13 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:370369 CAPLUS
DOCUMENT NUMBER: 135:195265
TITLE: Spectroscopic study of phenyl- and 4-pyridylmalondialdehydes
AUTHOR(S): Tkadlecova, M.; Havlicek, J.; Matejka, P.; Fahnrich, J.; Kral, V.; Volka, K.
CORPORATE SOURCE: Department of Analytical Chemistry, Institute of Chemical Technology, Prague, 166 28, Czech Rep.
SOURCE: Journal of Molecular Structure (2001), 563-564, 497-501
CODEN: JMOSB4; ISSN: 0022-2860
PUBLISHER: Elsevier Science B.V.

DOCUMENT TYPE: Journal
LANGUAGE: English

AB 4-Pyridylmalondialdehyde (I) and phenylmalondialdehyde (II) and their potassium salts were investigated by 1H and 13C NMR, Raman and UV spectroscopy. Three forms of I and two forms of II were found in water or DMSO solution depending on the pH by means of UV, 1H and 13C NMR spectroscopy. For II the chemical exchange between two cis-enol tautomers was observed, while the structure of I in the solution is zwitterionic. From the UV measurements and potentiometric titrns. pK1=1.9±0.1, pK2=7.2±0,1 for I and pK=4.0±0.2 for II were evaluated. For I the Raman spectra of solid state and DMSO solution are very similar, while for II they differ significantly. Butylamine was used as a model compound for the study of the potential interaction of malondialdehyde with compds. containing amino groups. The effect of addition of butylamine on the spectra of both malondialdehyde derivs. were indistinguishable from that corresponding to protonation-deprotonation processes.

IT **26591-66-2**, Propanedial,-phenyl-
RL: PRP (Properties)
(**phenylmalonaldehyde** and 4-pyridylmalonaldehyde studied by NMR, UV, and Raman spectroscopy)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



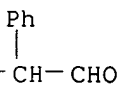
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 14 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:813471 CAPLUS
DOCUMENT NUMBER: 134:79977
TITLE: Isotopic perturbation of resonance in a homologous series of metal complexes with allylic cation character
AUTHOR(S): Perrin, Charles L.; Kim, Yeong-Joon
CORPORATE SOURCE: Department of Chemistry, University of California - San Diego, La Jolla, CA, 92093-0358, USA
SOURCE: Journal of Physical Organic Chemistry (2000), 13(11), 752-756
CODEN: JPOCEE; ISSN: 0894-3230
PUBLISHER: John Wiley & Sons Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

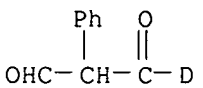
AB D-induced isotope shifts in MLn (L = statistical mixture of 3-oxido-2-phenyl-propenal-d0, -1-d and -1,3-d2) were measured. The 13C NMR isotope shifts, δC(D) - δC(H), for the aldehydic CH of AlL3, Al(OiPr)2L, Me2AlL, SiBr3L, SiL3+HBr2-, (CF3)3GeL, (EtO)4NbL, Rh(CO)2L, PdL2, SbCl4L and (EtO)4TaL are small and pos. The pos. isotope shifts are unusual, but since they are small and temperature independent they are intrinsic. A relation between these isotope shifts and the chemical shifts can be discerned and attributed to isotopic perturbation of resonance in an allylic cation.

IT **26591-66-2 316189-57-8 316189-59-0**
RL: PEP (Physical, engineering or chemical process); PRP (Properties); PROC (Process)
(isotopic perturbation of resonance in a homologous series of metal complexes with allylic cation character)

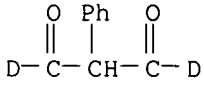
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



RN 316189-57-8 CAPLUS
CN Propanedial-1-d, 2-phenyl- (9CI) (CA INDEX NAME)



RN 316189-59-0 CAPLUS
CN Propanedial-1,3-d2, 2-phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 15 OF 52 USPATFULL on STN
ACCESSION NUMBER: 1999:137259 USPATFULL
TITLE: Substituted cyclohexylamines as central nervous systems agents
INVENTOR(S): Belliotti, Thomas R., Saline, MI, United States
Kesten, Suzanne R., Ann Arbor, MI, United States
Pugsley, Thomas A., Ann Arbor, MI, United States
Wustrow, David J., Ann Arbor, MI, United States
PATENT ASSIGNEE(S): Warner-Lambert Company, Morris Plains, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5977110		19991102	
	WO 9711070		19970327	
APPLICATION INFO.:	US 1998-43331		19980320	(9)
	WO 1996-US13687		19960823	
			19980320	PCT 371 date
			19980320	PCT 102(e) date

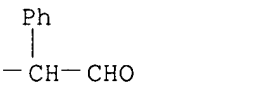
	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-4193P	19950922 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Shah, Mukund J.
ASSISTANT EXAMINER: Kessinger, Ann M.
LEGAL REPRESENTATIVE: Tinney, Francis J.
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
LINE COUNT: 1199
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Substituted cyclohexylamines and derivatives thereof are described, as well as methods for the preparation and pharmaceutical composition of same, which are useful as central nervous system agents and are particularly useful as dopaminergic, serotonergic, antipsychotic, and anxiolytic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

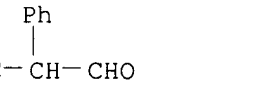
L14 ANSWER 16 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:71422 CAPLUS
DOCUMENT NUMBER: 132:207797
TITLE: Synthesis and BZR affinity of pyrazolo[1,5-a]pyrimidine derivatives. Part 1: Study of the structural features for BZR recognition
AUTHOR(S): Selleri, Silvia; Bruni, Fabrizio; Costagli, Camilla; Costanzo, Annarella; Guerrini, Gabriella; Ciciani, Giovanna; Costa, Barbara; Martini, Claudia

CORPORATE SOURCE: Department of Pharmaceutical Sciences, University of Firenze, Florence, 50121, Italy
SOURCE: Bioorganic & Medicinal Chemistry (1999), 7(12), 2705-2711
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Examination of the earlier published pharmacophoric points of the pyrazolo[1,5-a]pyrimidine derivs. as ligands for benzodiazepine receptors (BZR) led to the design of a novel class of 3,6-diaryl-4,7-dihydropyrazolo[1,5-a]pyrimidin-7-ones and to the determination of structural features involved in the BZR recognition.
IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and benzodiazepine receptor affinity of pyrazolopyrimidines and structure activity relationship)
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)

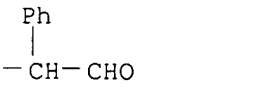


REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 17 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:690725 CAPLUS
DOCUMENT NUMBER: 129:315915
TITLE: Symmetry of hydrogen bonds, metal chelates, and trithiapentalene
AUTHOR(S): Kim, Yeong-Joon
CORPORATE SOURCE: Univ. of California, San Diego, CA, USA
SOURCE: (1998) 130 pp. Avail.: UMI, Order No. DA9835379
From: Diss. Abstr. Int., B 1998, 59(5), 2220
DOCUMENT TYPE: Dissertation
LANGUAGE: English
AB Unavailable
IT **26591-66-2**, Propanedial, phenyl- **26591-66-2D**, Propanedial, phenyl-, metal chelates
RL: PRP (Properties)
(symmetry of hydrogen bonds, metal chelates, and trithiapentalene)
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 18 OF 52 USPATFULL on STN
ACCESSION NUMBER: 1998:19715 USPATFULL
TITLE: 4-bicyclically substituted dihydropyridines, and their use in medicaments
INVENTOR(S): Straub, Alexander, Wuppertal, Germany, Federal Republic of

Goldmann, Siegfried, Wuppertal, Germany, Federal Republic of
Stoltefuss, Jurgen, Haan, Germany, Federal Republic of
Bechem, Martin, Wuppertal, Germany, Federal Republic of
Dembowsky, Klaus, Wuppertal, Germany, Federal Republic of
Gross, Rainer, Wuppertal, Germany, Federal Republic of
Hebisch, Siegbert, Bottrop, Germany, Federal Republic of
Hutter, Joachim, Wuppertal, Germany, Federal Republic of
Rounding, Howard-Paul, Wuppertal, Germany, Federal Republic of

PATENT ASSIGNEE(S): Bayer Aktiengesellschaft, Leverkusen, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5721248		19980224
APPLICATION INFO.:	US 1996-644880		19960510 (8)

RELATED APPLN. INFO.: Division of Ser. No. US 1994-261585, filed on 17 Jun 1994, now patented, Pat. No. US 5545646

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1993-4321030	19930624

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Fan, Jane
LEGAL REPRESENTATIVE: Sprung Kramer Schaefer & Briscoe
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
LINE COUNT: 1648
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention relates to new 4-bicyclically substituted dihydropyridines of the general formula (I) ##STR1## in which R.sub.1 to R.sub.5 have the meaning given in the description, processes for their preparation and their use in medicaments, in particular in agents for the treatment of cardiovascular diseases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 19 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:745424 CAPLUS
DOCUMENT NUMBER: 130:66153
TITLE: Symmetry of the Hydrogen Bond in Malonaldehyde Enol in Solution
AUTHOR(S): Perrin, Charles L.; Kim, Yeong-Joon
CORPORATE SOURCE: Department of Chemistry Biochemistry, University of California-San Diego, La Jolla, CA, 92093-0358, USA
SOURCE: Journal of the American Chemical Society (1998), 120(48), 12641-12645
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A fundamental question about the hydrogen bond is whether the hydrogen is located in the middle of the two electroneg. atoms, in a single-well potential, or else is closer to one of them and jumping between them, in a double-well potential. This question has been of interest recently because short, strong hydrogen bonds have been proposed to provide stabilization in some enzyme-catalyzed reactions. The NMR method of isotopic perturbation of equilibrium is now used to get an unambiguous answer for the intramol. hydrogen bond of the enol of 2-**phenylmalonaldehyde**-α-d in CDCl3 and pyridine-d5. The equilibrium isotope shift, which is large, downfield, and dependent on temperature, was measured in both 1H and 13C NMR spectroscopy. This result shows that the intramol. hydrogen bond of 2-**phenylmalonaldehyde** enol is asym., corresponding to the presence of two equilibrating tautomers.

REFERENCE COUNT: 80 THERE ARE 80 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS, CAOLD, USPATFULL' - CONTINUE? (Y)/N:y

L14 ANSWER 1 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2005:698376 CAPLUS
DOCUMENT NUMBER: 143:179648
TITLE: Germicidal compositions containing α-hydroxysulfonate aldehydes or mixts. with phthalaldehydes for disinfection or sterilization
INVENTOR(S): Zhu, Peter C.; Roberts, Charles G.; Tran, Yvonne
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 16 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

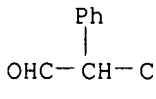
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005171201	A1	20050804	US 2004-769601	20040130
CA 2494419	AA	20050730	CA 2005-2494419	20050126
EP 1561474	A1	20050810	EP 2005-250477	20050128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
JP 2005213259	A2	20050811	JP 2005-21895	20050128

PRIORITY APPLN. INFO.: US 2004-769601 A 20040130

AB Disclosed herein are αHydroxy sulfonate aldehydes and synthesis methods therefor. Germicidal compns. including the α-hydroxy sulfonate aldehydes, are also disclosed. In one aspect, a germicidal composition may include a diluent, and a germicidally effective amount of a water-soluble germicidal compound including an aldehyde group and an α-hydroxy sulfonate group. The water-soluble compound may have a solubility of at least 5% in water. In a further aspect, the compound may include salts of the following compds.; 1-hydroxy-3-oxo-2-phenylpropane-1-sulfonic acid, (2-formylphenyl)hydroxymethane sulfonic acid, 1-hydroxy-2-(4-methanesulfonyl-2-nitrophenyl)-3-oxo-propane-1-sulfonic acid, 2-bromo-1-hydroxy-3-oxopropane-1-sulfonic acid, 2-chloro-1-hydroxy-3-oxopropane-1-sulfonic acid, 2-(1-formyl-2-hydroxy-2-sulfoethyl)isonicotinic acid, 2-benzooxazol-2-yl-1-hydroxy-3-oxo-propane-1-sulfonic acid, or 1-hydroxy-2-(4-methoxyphenyl)-3-oxopropane-1-sulfonic acid. Germicidal compns. including a mixture of α-hydroxysulfonate aldehyde and 1 or more phthalaldehydes, such as phthalaldehyde, isophthalaldehyde, terephthalaldehyde, or a combination thereof, are disclosed. Methods of using the compds. or compns. for killing bacteria, disinfection, or sterilization, are also disclosed. Thus, 2-bromo-1-hydroxy-3-oxopropane-1-sulfonic acid salt achieved a total kill of more than 1x106 of the Mycobacterium terrae bacteria within 120 min at 20°.

IT **26591-66-2**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(germicidal compns. containing α-hydroxysulfonate aldehydes or mixts. with phthalaldehydes for disinfection or sterilization)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



L14 ANSWER 2 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 2005:698361 CAPLUS
DOCUMENT NUMBER: 143:179647
TITLE: Germicidal compositions containing **phenylmalonaldehyde**-type compounds and phthalaldehydes for disinfection or sterilization
INVENTOR(S): Zhu, Peter C.; Roberts, Charles G.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 16 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

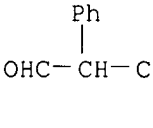
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005171121	A1	20050804	US 2004-769598	20040130
CA 2494460	AA	20050730	CA 2005-2494460	20050126
EP 1561478	A1	20050810	EP 2005-250479	20050128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
JP 2005213258	A2	20050811	JP 2005-21880	20050128

PRIORITY APPLN. INFO.: US 2004-769598 A 20040130

AB Germicidal compns. containing **phenylmalonaldehyde**-type compds., or mixts. of **phenylmalonaldehyde**-type compds. and phthalaldehydes, and methods of using such compns. for killing bacteria, disinfection, or sterilization, are disclosed. In a further aspect, the composition may also include a germicidal efficacy enhancer such as isophthalaldehyde or a combination of isophthalaldehyde and terephthalaldehyde.

IT **26591-66-2**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(germicidal compns. containing **phenylmalonaldehyde**-type compds. and phthalaldehydes for disinfection or sterilization)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)

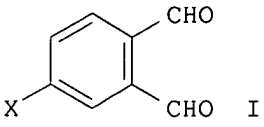


L14 ANSWER 3 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 2005:403673 CAPLUS
DOCUMENT NUMBER: 142:447007
TITLE: Improved process for the preparation of 4-substituted phthalaldehydes
INVENTOR(S): Zhu, Peter C.; Wang, Der-Haw
PATENT ASSIGNEE(S): Ethicon, Inc., USA
SOURCE: U.S., 14 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6891069	B1	20050510	US 2004-768785	20040130
EP 1559704	A1	20050803	EP 2005-250482	20050128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
JP 2005220134	A2	20050818	JP 2005-21906	20050128

PRIORITY APPLN. INFO.: US 2004-768785 A 20040130

GI

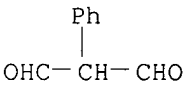


I

AB Disclosed herein are improved methods for synthesizing 4-substituted benzene-1,2-carbaldehydes I (X = F, Cl, Br, iodo, NO2). In one aspect, a method may include reacting a 4-substituted 1,2-bis(dibromomethyl)benzene with sulfuric acid to form a reaction product, introducing a solid sodium bicarbonate into the reaction product, and hydrolyzing the reaction product to form a 4-substituted benzene-1,2-carbaldehyde, after introducing the bicarbonate. Antibacterial activities for several substituted phthalaldehydes and related compds., especially against Mycobacterium terrae, are also given.

IT **26591-66-2**
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(antibacterial activity of substituted phthalaldehydes and related compds.)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:692085 CAPLUS
DOCUMENT NUMBER: 143:179595
TITLE: Germicidal compositions containing phthalaldehyde mixtures and methods of using such compositions for disinfection or sterilization
INVENTOR(S): Zhu, Peter C.; Roberts, Charles G.
PATENT ASSIGNEE(S): Ethicon, Inc., USA
SOURCE: Eur. Pat. Appl., 24 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1559435	A1	20050803	EP 2005-250481	20050128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
US 2005171216	A1	20050804	US 2004-769603	20040130
CA 2495133	AA	20050730	CA 2005-2495133	20050127
JP 2005247831	A2	20050915	JP 2005-21904	20050128

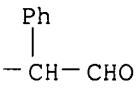
PRIORITY APPLN. INFO.: US 2004-769603 A 20040130

AB Germicidal compns. including a phthalaldehyde and methods of using such compns. for killing bacteria, disinfection, or sterilization, are disclosed. In one aspect, a germicidal composition may include a diluent, a germicidal compound, such as phthalaldehyde, and an amount of isophthalaldehyde to enhance the germicidal efficacy of the germicidal compound In the case of phthalaldehyde, the composition may have a staining property that is less than a staining property of a composition consisting essentially of phthalaldehyde diluted to the same concentration In another aspect, the composition may further include an amount of terephthalaldehyde to enhance the germicidal efficacy of the phthalaldehyde. In yet another aspect, a germicidal composition may include a diluent, phthalaldehyde, and a material

such as isophthalaldehyde, terephthalaldehyde, or a combination of isophthalaldehyde and terephthalaldehyde, in order to reduce a staining property of the phthalaldehyde.

IT **26591-66-2**
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(germicidal compns. containing phthalaldehyde mixts. and methods of using such compns. for disinfection or sterilization)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 52 USPATFULL on STN

ACCESSION NUMBER:	2005:197073 USPATFULL
TITLE:	Germicidal compositions containing phthalaldehyde mixtures and methods of using such compositions for disinfection or sterilization
INVENTOR(S):	Zhu, Peter C., Irvine, CA, UNITED STATES Roberts, Charles G., Long Beach, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005171216	A1	20050804	
APPLICATION INFO.:	US 2004-769603	A1	20040130	(10)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	BLAKELY SOKOLOFF TAYLOR & ZAFMAN, 12400 WILSHIRE BOULEVARD, SEVENTH FLOOR, LOS ANGELES, CA, 90025-1030, US
NUMBER OF CLAIMS:	24
EXEMPLARY CLAIM:	1
LINE COUNT:	1335

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Germicidal compositions including a phthalaldehyde and methods of using such compositions for killing bacteria, disinfection, or sterilization, are disclosed. In one aspect, a germicidal composition may include a diluent, a germicidal compound, such as phthalaldehyde, and an amount of isophthalaldehyde to enhance the germicidal efficacy of the germicidal compound. In the case of phthalaldehyde, the composition may have a staining property that is less than a staining property of a composition consisting essentially of phthalaldehyde diluted to the same concentration. In another aspect, the composition may further include an amount of terephthalaldehyde to enhance the germicidal efficacy of the phthalaldehyde. In yet another aspect, a germicidal composition may include a diluent, phthalaldehyde, and a material such as isophthalaldehyde, terephthalaldehyde, or a combination of isophthalaldehyde and terephthalaldehyde, in order to reduce a staining property of the phthalaldehyde.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 6 OF 52 USPATFULL on STN

ACCESSION NUMBER:	2005:197072 USPATFULL
TITLE:	Germicidal compositions containing halogenated phthalaldehyes, and methods of using such compositions for disinfection or sterilization
INVENTOR(S):	Zhu, Peter C., Irvine, CA, UNITED STATES Roberts, Charles G., Long Beach, CA, UNITED STATES
PATENT ASSIGNEE(S):	Ethicon, Inc. (U.S. corporation)

	NUMBER	KIND	DATE

PATENT INFORMATION:	US 2005171215	A1	20050804
APPLICATION INFO.:	US 2004-769369	A1	20040130 (10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BLAKELY SOKOLOFF TAYLOR & ZAFMAN, 12400 WILSHIRE BOULEVARD, SEVENTH FLOOR, LOS ANGELES, CA, 90025-1030, US
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 1293
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

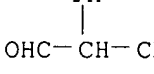
AB Germicidal compositions including a diluent, and a germicidal compound having the formula: ##STR1## wherein X is a halogen, and methods of using such compositions for killing bacteria, disinfection, or sterilization are disclosed. In one aspect, the composition may include a germicidally effective amount of the compound. For example, the composition may include an amount of the compound that is effective to kill at least 1+10.sup.6 Mycobacterium terrae bacteria in contact with the composition in less than one hour with a bacteria suspension test at a temperature of 20° C. In another aspect, the compound may have a staining property that is less than that of phthalaldehyde.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:562755 CAPLUS
DOCUMENT NUMBER: 141:411304
TITLE: Side chain liquid crystal polyacrylate and polymethacrylate nickel complexes free from covalent cross-linking
AUTHOR(S): Styring, Peter; Saez, Isabel M.
CORPORATE SOURCE: Department of Chemical and Process Engineering, The University of Sheffield, Sheffield, S1 3JD, UK
SOURCE: Molecular Crystals and Liquid Crystals (2004), 411, 1533-1544
CODEN: MCLCD8; ISSN: 1542-1406
PUBLISHER: Taylor & Francis, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Non-sym. nickel(II) complexes containing a single acrylate or methacrylate group have been synthesized and polymerized radically in THF solution using AIBN as the initiator. This results in the incorporation of the metal complexes into a polyacrylate or polymethacrylate as freely mobile side chains, free from crosslinking. While the monomers are non-liquid crystalline, the polymers show smectic A liquid crystal phases.

IT **26591-66-2, Phenylmalonaldehyde**
RL: RCT (Reactant); RACT (Reactant or reagent)
(monomer starting material; preparation of nickel complex acrylic monomers and their liq crystalline polymers)
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:968273 CAPLUS
DOCUMENT NUMBER: 140:416668
TITLE: Trinuclear Metal Chelates of β-Aminovinylimines
AUTHOR(S): Burlov, A. S.; Kuznetsova, L. I.; Uraev, A. I.; Kurbatov, V. P.; Bondarenko, G. I.; Vasil'chenko, I. S.; Garnovskii, A. D.
CORPORATE SOURCE: Research Institute of Physical and Organic Chemistry,

Rostov State University, Rostov-on-Don, Russia
SOURCE: Russian Journal of General Chemistry (Translation of Zhurnal Obshchei Khimii) (2003), 73(8), 1190-1197
CODEN: RJGCEK; ISSN: 1070-3632
PUBLISHER: MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:416668

AB The chemical and electrochem. syntheses of Cu(II), Ni(II), Co(II), Zn(II), and Cd(II) trinuclear metal chelates with a new tetradentate ligand system including bis[(2-hydroxy-, -mercapto-, and -N-tosylamino)anils] of nitro- and **phenylmalonaldehyde** were performed. Temperature dependences of magnetic and ESR spectral properties of the complexes were studied to show that the antiferromagnetic spin-spin exchange interactions between Cu(II) ions are intra- and intermol. in nature and depend on the composition and structure of the coordination units, steric effects, nature of the substituent in the malonaldehyde moiety of the ligand, as well as on the method of synthesis of the complex compds.

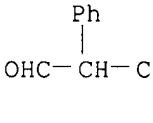
REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 9 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:835616 CAPLUS
DOCUMENT NUMBER: 138:368783
TITLE: Product class 9: isoxazoles
AUTHOR(S): Wakefield, B. J.
CORPORATE SOURCE: Ultrafine Chemicals, Manchester Science Park, Manchester, UK
SOURCE: Science of Synthesis (2002), 11, 229-288
CODEN: SSCYJ9
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review. Synthesis methods for simple and condensed isoxazoles, as well as their structure, properties, and reactions, are reviewed.

IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(review of preparation and reactions of simple and condensed isoxazoles)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 317 THERE ARE 317 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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FULL ESTIMATED COST	0.30	482.31

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-29.93

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PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE CONTENT: 1988-PRESENT (VOL 143 ISS 26 (20051223/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

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US    6949561 27 SEP 2005
DE 1020040544 15 SEP 2005
EP    1582199 05 OCT 2005
JP 2005320486 17 OCT 2005
WO 2005097137 20 OCT 2005

Expanded G-group definition display now available.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

MARPATpreviews will be removed from STN on December 31, 2005.

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        171111 "1"/BI
         17232 "3"/BI
             0 "PROPANEDIAL"/BI
             0 "2-PHENYL-1,3-PROPANEDIAL"/BI
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             0 26591-66-2/BI
             0 316189-57-8/BI
             0 316189-59-0/BI
L15          0 (PHENYLMALONALDEHYDE/BI OR "2-PHENYL-1,3-PROPANEDIAL"/BI OR
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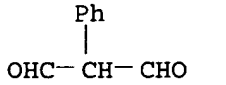


REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

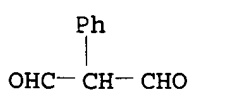
L14 ANSWER 4 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:692085 CAPLUS
DOCUMENT NUMBER: 143:179595
TITLE: Germicidal compositions containing phthalaldehyde mixtures and methods of using such compositions for disinfection or sterilization
INVENTOR(S): Zhu, Peter C.; Roberts, Charles G.
PATENT ASSIGNEE(S): Ethicon, Inc., USA
SOURCE: Eur. Pat. Appl., 24 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 1559435	A1	20050803	EP 2005-250481	20050128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
US 2005171216	A1	20050804	US 2004-769603	20040130
CA 2495133	AA	20050730	CA 2005-2495133	20050127
JP 2005247831	A2	20050915	JP 2005-21904	20050128

PRIORITY APPLN. INFO.: US 2004-769603 A 20040130

AB Germicidal compns. including a phthalaldehyde and methods of using such compns. for killing bacteria, disinfection, or sterilization, are disclosed. In one aspect, a germicidal composition may include a diluent, a germicidal compound, such as phthalaldehyde, and an amount of isophthalaldehyde to enhance the germicidal efficacy of the germicidal compound In the case of phthalaldehyde, the composition may have a staining property that is less than a staining property of a composition consisting essentially of phthalaldehyde diluted to the same concentration In another aspect, the composition may further include an amount of terephthalaldehyde to enhance the germicidal efficacy of the phthalaldehyde. In yet another aspect, a germicidal composition may include a diluent, phthalaldehyde, and a material such as isophthalaldehyde, terephthalaldehyde, or a combination of isophthalaldehyde and terephthalaldehyde, in order to reduce a staining property of the phthalaldehyde.

IT **26591-66-2**
RL: BUU (Biological use, unclassified); PEP (Physical, engineering or chemical process); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PROC (Process); USES (Uses)
(germicidal compns. containing phthalaldehyde mixts. and methods of using such compns. for disinfection or sterilization)
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 5 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2005:197073 USPATFULL
TITLE: Germicidal compositions containing phthalaldehyde mixtures and methods of using such compositions for disinfection or sterilization
INVENTOR(S): Zhu, Peter C., Irvine, CA, UNITED STATES
Roberts, Charles G., Long Beach, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005171216	A1	20050804	
APPLICATION INFO.:	US 2004-769603	A1	20040130	(10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BLAKELY SOKOLOFF TAYLOR & ZAFMAN, 12400 WILSHIRE BOULEVARD, SEVENTH FLOOR, LOS ANGELES, CA, 90025-1030, US
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
LINE COUNT: 1335
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Germicidal compositions including a phthalaldehyde and methods of using such compositions for killing bacteria, disinfection, or sterilization, are disclosed. In one aspect, a germicidal composition may include a diluent, a germicidal compound, such as phthalaldehyde, and an amount of isophthalaldehyde to enhance the germicidal efficacy of the germicidal compound. In the case of phthalaldehyde, the composition may have a staining property that is less than a staining property of a composition consisting essentially of phthalaldehyde diluted to the same concentration. In another aspect, the composition may further include an amount of terephthalaldehyde to enhance the germicidal efficacy of the phthalaldehyde. In yet another aspect, a germicidal composition may include a diluent, phthalaldehyde, and a material such as isophthalaldehyde, terephthalaldehyde, or a combination of isophthalaldehyde and terephthalaldehyde, in order to reduce a staining property of the phthalaldehyde.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 6 OF 52 USPATFULL on STN
ACCESSION NUMBER: 2005:197072 USPATFULL
TITLE: Germicidal compositions containing halogenated phthalaldehyes, and methods of using such compositions for disinfection or sterilization
INVENTOR(S): Zhu, Peter C., Irvine, CA, UNITED STATES
Roberts, Charles G., Long Beach, CA, UNITED STATES
PATENT ASSIGNEE(S): Ethicon, Inc. (U.S. corporation)

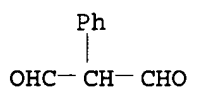
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005171215	A1	20050804	
APPLICATION INFO.:	US 2004-769369	A1	20040130	(10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BLAKELY SOKOLOFF TAYLOR & ZAFMAN, 12400 WILSHIRE BOULEVARD, SEVENTH FLOOR, LOS ANGELES, CA, 90025-1030, US
NUMBER OF CLAIMS: 14
EXEMPLARY CLAIM: 1
LINE COUNT: 1293
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Germicidal compositions including a diluent, and a germicidal compound having the formula: ##STR1## wherein X is a halogen, and methods of

using such compositions for killing bacteria, disinfection, or sterilization are disclosed. In one aspect, the composition may include a germicidally effective amount of the compound. For example, the composition may include an amount of the compound that is effective to kill at least 1+10.sup.6 Mycobacterium terrae bacteria in contact with the composition in less than one hour with a bacteria suspension test at a temperature of 20° C. In another aspect, the compound may have a staining property that is less than that of phthalaldehyde.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 7 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:562755 CAPLUS
DOCUMENT NUMBER: 141:411304
TITLE: Side chain liquid crystal polyacrylate and polymethacrylate nickel complexes free from covalent cross-linking
AUTHOR(S): Styring, Peter; Saez, Isabel M.
CORPORATE SOURCE: Department of Chemical and Process Engineering, The University of Sheffield, Sheffield, S1 3JD, UK
SOURCE: Molecular Crystals and Liquid Crystals (2004), 411, 1533-1544
CODEN: MCLCD8; ISSN: 1542-1406
PUBLISHER: Taylor & Francis, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Non-sym. nickel(II) complexes containing a single acrylate or methacrylate group have been synthesized and polymerized radically in THF solution using AIBN as the initiator. This results in the incorporation of the metal complexes into a polyacrylate or polymethacrylate as freely mobile side chains, free from crosslinking. While the monomers are non-liquid crystalline, the polymers show smectic A liquid crystal phases.
IT **26591-66-2, Phenylmalonaldehyde**
RL: RCT (Reactant); RACT (Reactant or reagent)
(monomer starting material; preparation of nickel complex acrylic monomers and their liq crystalline polymers)
RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 8 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:968273 CAPLUS
DOCUMENT NUMBER: 140:416668
TITLE: Trinuclear Metal Chelates of β-Aminovinylimines
AUTHOR(S): Burlov, A. S.; Kuznetsova, L. I.; Uraev, A. I.; Kurbatov, V. P.; Bondarenko, G. I.; Vasil'chenko, I. S.; Garnovskii, A. D.
CORPORATE SOURCE: Research Institute of Physical and Organic Chemistry, Rostov State University, Rostov-on-Don, Russia
SOURCE: Russian Journal of General Chemistry (Translation of Zhurnal Obshchei Khimii) (2003), 73(8), 1190-1197
CODEN: RJGCEK; ISSN: 1070-3632
PUBLISHER: MAIK Nauka/Interperiodica Publishing
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:416668

AB The chemical and electrochem. syntheses of Cu(II), Ni(II), Co(II), Zn(II), and Cd(II) trinuclear metal chelates with a new tetradentate ligand system including bis[(2-hydroxy-, -mercapto-, and -N-tosylamino)anils] of nitro- and **phenylmalonaldehyde** were performed. Temperature dependences of magnetic and ESR spectral properties of the complexes were studied to show that the antiferromagnetic spin-spin exchange interactions between Cu(II) ions are intra- and intermol. in nature and depend on the composition and structure of the coordination units, steric effects, nature of the substituent in the malonaldehyde moiety of the ligand, as well as on the method of synthesis of the complex compds.

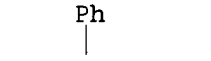
REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L14 ANSWER 9 OF 52 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:835616 CAPLUS
DOCUMENT NUMBER: 138:368783
TITLE: Product class 9: isoxazoles
AUTHOR(S): Wakefield, B. J.
CORPORATE SOURCE: Ultrafine Chemicals, Manchester Science Park, Manchester, UK
SOURCE: Science of Synthesis (2002), 11, 229-288
CODEN: SSCYJ9
PUBLISHER: Georg Thieme Verlag
DOCUMENT TYPE: Journal; General Review
LANGUAGE: English

AB A review. Synthesis methods for simple and condensed isoxazoles, as well as their structure, properties, and reactions, are reviewed.

IT **26591-66-2**
RL: RCT (Reactant); RACT (Reactant or reagent)
(review of preparation and reactions of simple and condensed isoxazoles)

RN 26591-66-2 CAPLUS
CN Propanedial, phenyl- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 317 THERE ARE 317 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> file marpat

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.30	482.31

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-29.93

FILE 'MARPAT' ENTERED AT 12:48:57 ON 27 DEC 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

FILE CONTENT: 1988-PRESENT (VOL 143 ISS 26 (20051223/ED)

MOST RECENT CITATIONS FOR PATENTS FROM FIVE MAJOR ISSUING AGENCIES
(COVERAGE TO THESE DATES IS NOT COMPLETE):

US 6949561 27 SEP 2005
DE 1020040544 15 SEP 2005

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EP    1582199 05 OCT 2005
JP 2005320486 17 OCT 2005
WO 2005097137 20 OCT 2005

Expanded G-group definition display now available.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

MARPATpreviews will be removed from STN on December 31, 2005.

=> s e1-5
             0 PHENYLMALONALDEHYDE/BI
         25910 "2"/BI
            73 "PHENYL"/BI
        171111 "1"/BI
         17232 "3"/BI
             0 "PROPANEDIAL"/BI
             0 "2-PHENYL-1,3-PROPANEDIAL"/BI
                 (("2"(W)"PHENYL"(W)"1"(W)"3"(W)"PROPANEDIAL")/BI)
             0 26591-66-2/BI
             0 316189-57-8/BI
             0 316189-59-0/BI
L15          0 (PHENYLMALONALDEHYDE/BI OR "2-PHENYL-1,3-PROPANEDIAL"/BI OR
               26591-66-2/BI OR 316189-57-8/BI OR 316189-59-0/BI)

=>

---Logging off of STN---


=>
Executing the logoff script...


=> LOG Y

COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                   17.06     499.37

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
                                                      ENTRY    SESSION
CA SUBSCRIBER PRICE                                    0.00     -29.93

STN INTERNATIONAL LOGOFF AT 12:50:08 ON 27 DEC 2005


Connecting via Winsock to STN



Welcome to STN International!  Enter x:x

LOGINID:ssptaysc1617

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2


* * * * * * * * * *   Welcome to STN International   * * * * * * * * * *

 NEWS  1          Web Page URLs for STN Seminar Schedule - N. America
```

```
NEWS  2          "Ask CAS" for self-help around the clock
NEWS  3  SEP 09  ACD predicted properties enhanced in REGISTRY/ZREGISTRY
NEWS  4  OCT 03  MATHDI removed from STN
NEWS  5  OCT 04  CA/CAplus-Canadian Intellectual Property Office (CIPO) added
                 to core patent offices
NEWS  6  OCT 13  New CAS Information Use Policies Effective October 17, 2005
NEWS  7  OCT 17  STN(R) AnaVist(TM), Version 1.01, allows the export/download
                 of CAplus documents for use in third-party analysis and
                 visualization tools
NEWS  8  OCT 27  Free KWIC format extended in full-text databases
NEWS  9  OCT 27  DIOGENES content streamlined
NEWS 10  OCT 27  EPFULL enhanced with additional content
NEWS 11  NOV 14  CA/CAplus - Expanded coverage of German academic research
NEWS 12  NOV 30  REGISTRY/ZREGISTRY on STN(R) enhanced with experimental
                 spectral property data
NEWS 13  DEC 05  CASREACT(R) - Over 10 million reactions available
NEWS 14  DEC 14 2006 MeSH terms loaded in MEDLINE/LMEDLINE
NEWS 15  DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
NEWS 16  DEC 14 CA/CAplus to be enhanced with updated IPC codes
NEWS 17  DEC 16 MARPATprev will be removed from STN on December 31, 2005
NEWS 18  DEC 21 IPC search and display fields enhanced in CA/CAplus with the
                IPC reform
NEWS 19  DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/USPAT2

NEWS EXPRESS  JANUARY 03 CURRENT VERSION FOR WINDOWS IS V8.01,
              CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
              AND CURRENT DISCOVER FILE IS DATED 19 DECEMBER 2005.
              V8.0 USERS CAN OBTAIN THE UPGRADE TO V8.01 AT
              http://download.cas.org/express/v8.0-Discover/

NEWS DCOST    SINCE APPROXIMATELY 20:00 COLUMBUS TIME DECEMBER 29,
              SOME ONLINE COST DISPLAYS HAVE BEEN SHOWING COSTS IN
              2006 PRICES FOR STN COLUMBUS FILES.  THIS HAS BEEN
              CORRECTED.  PLEASE BE ASSURED THAT YOU WILL BE BILLED
              ACCORDING TO 2005 PRICES UNTIL JAN 1.  PLEASE CONTACT
              YOUR LOCAL HELP DESK IF YOU HAVE ANY QUESTIONS.  WE
              APOLOGIZE FOR THE ERROR.

NEWS HOURS    STN Operating Hours Plus Help Desk Availability
NEWS INTER    General Internet Information
NEWS LOGIN    Welcome Banner and News Items
NEWS PHONE    Direct Dial and Telecommunication Network Access to STN
NEWS WWW      CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that
specific topic.

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  of commercial gateways or other similar uses is prohibited and may
  result in loss of user privileges and other penalties.

  * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 15:25:03 ON 04 JAN 2006

=> file reg
COST IN U.S. DOLLARS                            SINCE FILE      TOTAL
                                                   ENTRY    SESSION
FULL ESTIMATED COST                                 0.21       0.21

FILE 'REGISTRY' ENTERED AT 15:25:14 ON 04 JAN 2006
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
```

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 3 JAN 2006 HIGHEST RN 871080-87-4
DICTIONARY FILE UPDATES: 3 JAN 2006 HIGHEST RN 871080-87-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JULY 14, 2005

Please note that search-term pricing does apply when
conducting SmartSELECT searches.

****
* *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added, *
* effective March 20, 2005. A new display format, IDERL, is now *
* available and contains the CA role and document type information. *
* *
****

Structure search iteration limits have been increased. See HELP SLIMITS
for details.

REGISTRY includes numerically searchable data for experimental and
predicted properties as well as tags indicating availability of
experimental property data in the original document. For information
on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=>
Uploading C:\Program Files\Stnexp\Queries\10769598-5.str

chain nodes :
1 2 3 4
chain bonds :
1-2 2-3 2-4
exact/norm bonds :
1-2
exact bonds :
2-3 2-4

G1:Cb,Cy,Hy,CH3,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,Ph

Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS

L1 STRUCTURE UPLOADED

```
=> s l1
SAMPLE SEARCH INITIATED 15:25:32 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    80401 TO ITERATE

  2.5% PROCESSED     2000 ITERATIONS                                  0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **INCOMPLETE**
                        BATCH   **INCOMPLETE**
PROJECTED ITERATIONS:      1591170 TO  1624870
PROJECTED ANSWERS:               0 TO        0

L2             0 SEA SSS SAM L1

=>
Uploading C:\Program Files\Stnexp\Queries\10769598-6.str
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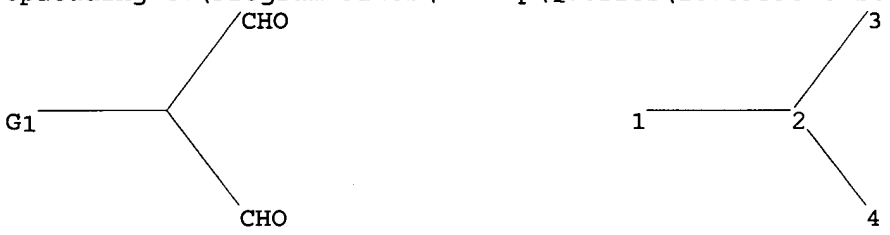



```
chain nodes :
1  2  3  4
chain bonds :
1-2  2-3  2-4
exact/norm bonds :
1-2
exact bonds :
2-3  2-4


G1:Cb,Cy,Hy,CH3,Et,n-Pr,i-Pr,n-Bu,i-Bu,s-Bu,t-Bu,Ph,Ak

Match level :
1:CLASS  2:CLASS  3:CLASS  4:CLASS



L3      STRUCTURE UPLOADED

=> s l3
SAMPLE SEARCH INITIATED 15:27:16 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -    80401 TO ITERATE

  2.5% PROCESSED     2000 ITERATIONS                                  2 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

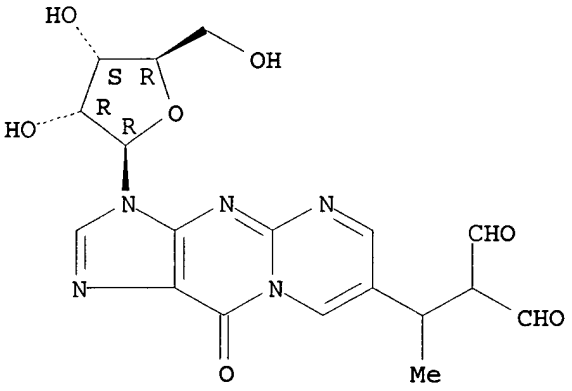
FULL FILE PROJECTIONS:  ONLINE  **INCOMPLETE**
                        BATCH   **INCOMPLETE**
PROJECTED ITERATIONS:      1591170 TO  1624870
PROJECTED ANSWERS:            1071 TO     2145

L4             2 SEA SSS SAM L3

=> d scan tot
'TOT' IS NOT A VALID FORMAT FOR FILE 'REGISTRY'
```

L4 2 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Propanedial, [1-(3,10-dihydro-10-oxo-3-β-D-ribofuranosylpyrimido[1,2-a]purin-7-yl)ethyl]- (9CI)
MF C18 H19 N5 O7

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

The following are valid formats:

Substance information can be displayed by requesting individual fields or predefined formats. The predefined substance formats are: (RN = CAS Registry Number)

REG - RN
SAM - Index Name, MF, and structure - no RN
FIDE - All substance data, except sequence data
IDE - FIDE, but only 50 names
SQIDE - IDE, plus sequence data
SQIDE3 - Same as SQIDE, but 3-letter amino acid codes are used
SQD - Protein sequence data, includes RN
SQD3 - Same as SQD, but 3-letter amino acid codes are used
SQN - Protein sequence name information, includes RN

CALC - Table of calculated properties
EPROP - Table of experimental properties
PROP - EPROP and CALC

Any CA File format may be combined with any substance format to obtain CA references citing the substance. The substance formats must be cited first. The CA File predefined formats are:

ABS -- Abstract
APPS -- Application and Priority Information
BIB -- CA Accession Number, plus Bibliographic Data
CAN -- CA Accession Number
CBIB -- CA Accession Number, plus Bibliographic Data (compressed)
IND -- Index Data
IPC -- International Patent Classification
PATS -- PI, SO
STD -- BIB, IPC, and NCL

IABS -- ABS, indented, with text labels
IBIB -- BIB, indented, with text labels

ISTD -- STD format, indented

OBIB -------- AN, plus Bibliographic Data (original)
OIBIB ------- OBIB, indented with text labels

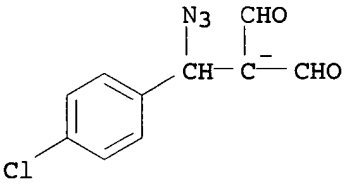
SBIB -------- BIB, no citations
SIBIB ------- IBIB, no citations

The ALL format gives FIDE BIB ABS IND RE, plus sequence data when it is available.
The MAX format is the same as ALL.
The IALL format is the same as ALL with BIB ABS and IND indented, with text labels.

For additional information, please consult the following help messages:

HELP DFIELDS -- To see a complete list of individual display fields.
HELP FORMATS -- To see detailed descriptions of the predefined formats.
HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):1

L4 2 ANSWERS REGISTRY COPYRIGHT 2006 ACS on STN
IN Propanedial, [azido(4-chlorophenyl)methyl]-, ion(1-) (9CI)
MF C10 H7 Cl N3 O2
CI COM



ALL ANSWERS HAVE BEEN SCANNED

=> s l3 full
FULL SEARCH INITIATED 15:28:33 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1605908 TO ITERATE

34.3% PROCESSED 550176 ITERATIONS 104 ANSWERS

60.8% PROCESSED 976743 ITERATIONS 167 ANSWERS

62.3% PROCESSED 1000000 ITERATIONS 169 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.37

FULL FILE PROJECTIONS: ONLINE **INCOMPLETE**
BATCH **INCOMPLETE**
PROJECTED ITERATIONS: 1605908 TO 1605908
PROJECTED ANSWERS: 222 TO 320

L5 169 SEA SSS FUL L3

=> file caplus
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 169.58 169.79

FILE 'CAPLUS' ENTERED AT 15:29:20 ON 04 JAN 2006

FILE COVERS 1907 - 4 Jan 2006 VOL 144 ISS 2
FILE LAST UPDATED: 3 Jan 2006 (20060103/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply.
They are available for your review at:

http://www.cas.org/infopolicy.html

```
=> s l5
L6          84 L5

=> s l6 and
MISSING TERM AFTER L6 AND
Operators must be followed by a search term, L-number, or query name.

=> s l6 and (germicidal or antimicrobial or antibacterial or disinfect? or
steriliz?)
          3495 GERMICIDAL
         60223 ANTIMICROBIAL
         82400 ANTIBACTERIAL
         96527 DISINFECT?
         54880 STERILIZ?
L7           6 L6 AND (GERMICIDAL OR ANTIMICROBIAL OR ANTIBACTERIAL OR DISINFEC
               T? OR STERILIZ?)

=> d ibib abs hitstr l7 tot

L7   ANSWER 1 OF 6  CAPLUS  COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER:         2005:698376  CAPLUS
DOCUMENT NUMBER:          143:179648
TITLE:                    Germicidal compositions containing
                          α-hydroxysulfonate aldehydes or mixtures with
                          phthalaldehydes for disinfection or
                          sterilization
INVENTOR(S):              Zhu, Peter C.; Roberts, Charles G.; Tran, Yvonne
PATENT ASSIGNEE(S):       USA
SOURCE:                   U.S. Pat. Appl. Publ., 16 pp.
                          CODEN: USXXCO
DOCUMENT TYPE:            Patent
LANGUAGE:                 English
FAMILY ACC. NUM. COUNT:   1
PATENT INFORMATION:

     PATENT NO.           KIND   DATE        APPLICATION NO.         DATE
     ---------------      ----   --------    --------------------    --------
     US 2005171201         A1    20050804    US 2004-769601          20040130
     CA 2494419            AA    20050730    CA 2005-2494419         20050126
     EP 1561474            A1    20050810    EP 2005-250477          20050128
         R:  AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,
             IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK,
```

BA, HR, IS, YU

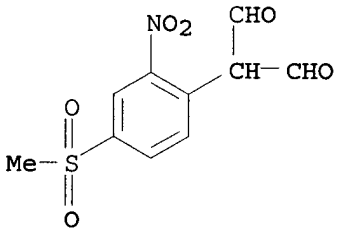
JP 2005213259	A2	20050811	JP 2005-21895	20050128
CN 1675997	A	20051005	CN 2005-10006827	20050128

PRIORITY APPLN. INFO.: US 2004-769601 A 20040130

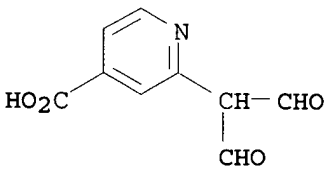
AB Disclosed herein are αHydroxy sulfonate aldehydes and synthesis methods therefor. **Germicidal** compns. including the α-hydroxy sulfonate aldehydes, are also disclosed. In one aspect, a **germicidal** composition may include a diluent, and a germicidally effective amount of a water-soluble **germicidal** compound including an aldehyde group and an α-hydroxy sulfonate group. The water-soluble compound may have a solubility of at least 5% in water. In a further aspect, the compound may include salts of the following compds.; 1-hydroxy-3-oxo-2-phenylpropane-1-sulfonic acid, (2-formylphenyl)hydroxymethane sulfonic acid, 1-hydroxy-2-(4-methanesulfonyl-2-nitrophenyl)-3-oxo-propane-1-sulfonic acid, 2-bromo-1-hydroxy-3-oxopropane-1-sulfonic acid, 2-chloro-1-hydroxy-3-oxopropane-1-sulfonic acid, 2-(1-formyl-2-hydroxy-2-sulfoethyl)isonicotinic acid, 2-benzooxazol-2-yl-1-hydroxy-3-oxo-propane-1-sulfonic acid, or 1-hydroxy-2-(4-methoxyphenyl)-3-oxopropane-1-sulfonic acid. **Germicidal** compns. including a mixture of α-hydroxysulfonate aldehyde and 1 or more phthalaldehydes, such as phthalaldehyde, isophthalaldehyde, terephthalaldehyde, or a combination thereof, are disclosed. Methods of using the compds. or compns. for killing bacteria, **disinfection**, or **sterilization**, are also disclosed. Thus, 2-bromo-1-hydroxy-3-oxopropane-1-sulfonic acid salt achieved a total kill of more than 1x106 of the Mycobacterium terrae bacteria within 120 min at 20°.

IT **197251-71-1 861221-49-0**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**germicidal** compns. containing α-hydroxysulfonate aldehydes or mixts. with phthalaldehydes for **disinfection** or **sterilization**)

RN 197251-71-1 CAPLUS
CN Propanedial, [4-(methylsulfonyl)-2-nitrophenyl]- (9CI) (CA INDEX NAME)



RN 861221-49-0 CAPLUS
CN 4-Pyridinecarboxylic acid, 2-(1-formyl-2-oxoethyl)- (9CI) (CA INDEX NAME)



L7 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER:	2005:698361 CAPLUS
DOCUMENT NUMBER:	143:179647
TITLE:	**Germicidal** compositions containing phenylmalonaldehyde-type compounds and phthalaldehydes

for **disinfection** or **sterilization**
INVENTOR(S): Zhu, Peter C.; Roberts, Charles G.
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 16 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

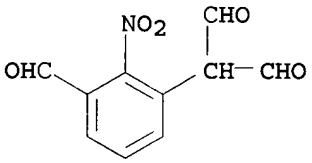
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005171121	A1	20050804	US 2004-769598	20040130
CA 2494460	AA	20050730	CA 2005-2494460	20050126
EP 1561478	A1	20050810	EP 2005-250479	20050128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
JP 2005213258	A2	20050811	JP 2005-21880	20050128

PRIORITY APPLN. INFO.: US 2004-769598 A 20040130

AB **Germicidal** compns. containing phenylmalonaldehyde-type compds., or mixts. of phenylmalonaldehyde-type compds. and phthalaldehydes, and methods of using such compns. for killing bacteria, **disinfection**, or **sterilization**, are disclosed. In a further aspect, the composition may also include a **germicidal** efficacy enhancer such as isophthalaldehyde or a combination of isophthalaldehyde and terephthalaldehyde.

IT **861218-75-9**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**germicidal** compns. containing phenylmalonaldehyde-type compds. and phthalaldehydes for **disinfection** or **sterilization**)

RN 861218-75-9 CAPLUS
CN Propanedial, (3-formyl-2-nitrophenyl)- (9CI) (CA INDEX NAME)



L7 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:403673 CAPLUS
DOCUMENT NUMBER: 142:447007
TITLE: Improved process for the preparation of 4-substituted phthalaldehydes
INVENTOR(S): Zhu, Peter C.; Wang, Der-Haw
PATENT ASSIGNEE(S): Ethicon, Inc., USA
SOURCE: U.S., 14 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

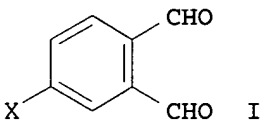
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6891069	B1	20050510	US 2004-768785	20040130
EP 1559704	A1	20050803	EP 2005-250482	20050128
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				

IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU

JP 2005220134 A2 20050818 JP 2005-21906 20050128

PRIORITY APPLN. INFO.: US 2004-768785 A 20040130

GI



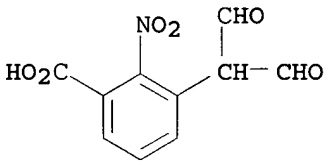
AB Disclosed herein are improved methods for synthesizing 4-substituted benzene-1,2-carbaldehydes I (X = F, Cl, Br, iodo, NO2). In one aspect, a method may include reacting a 4-substituted 1,2-bis(dibromomethyl)benzene with sulfuric acid to form a reaction product, introducing a solid sodium bicarbonate into the reaction product, and hydrolyzing the reaction product to form a 4-substituted benzene-1,2-carbaldehyde, after introducing the bicarbonate. **Antibacterial** activities for several substituted phthalaldehydes and related compds., especially against Mycobacterium terrae, are also given.

IT **205680-83-7**

RL: BSU (Biological study, unclassified); BIOL (Biological study) (**antibacterial** activity of substituted phthalaldehydes and related compds.)

RN 205680-83-7 CAPLUS

CN Benzoic acid, 3-(1-formyl-2-oxoethyl)-2-nitro- (9CI) (CA INDEX NAME)



REFERENCE COUNT: 47 THERE ARE 47 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2004:633526 CAPLUS

DOCUMENT NUMBER: 141:167817

TITLE: Treatment of diseases with alpha-7 NACh receptor full agonists

INVENTOR(S): Groppi, Vincent Edward, Jr.; Rogers, Bruce Nelsen; Rudmann, Daniel Gregory

PATENT ASSIGNEE(S): Pharmacia & Upjohn Company, USA

SOURCE: PCT Int. Appl., 142 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004064836	A2	20040805	WO 2004-IB115	20040112
WO 2004064836	A3	20041223		

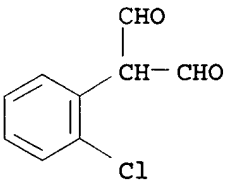
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ

CA 2513433 AA 20040805 CA 2004-2513433 20040112
EP 1587511 A2 20051026 EP 2004-701414 20040112
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK
PRIORITY APPLN. INFO.: US 2003-441801P P 20030122
WO 2004-IB115 W 20040112
OTHER SOURCE(S): MARPAT 141:167817

AB The present invention relates to compositions and methods to treat diseases or conditions with alpha-7 nicotinic acetylcholine receptor (AChR) full agonists by decreasing levels of tumor necrosis factor-alpha and/or by stimulating vascular angiogenesis.

IT **655785-37-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of N-(quinuclidinyl)heteroarylamides as nAChR agonists for use in combination therapy for treatment of ADHD)

RN 655785-37-8 CAPLUS
CN Propanedial, (2-chlorophenyl)- (9CI) (CA INDEX NAME)



L7 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:252225 CAPLUS
DOCUMENT NUMBER: 140:284677
TITLE: Isolation, structure elucidation, and bioactivities of novel ecteinascidins from Ecteinascidia turbinata
INVENTOR(S): Rinehart, Kenneth L.; Sakai, Ryuichi
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 38 pp., Cont.-in-part of U.S. Ser. No. 949,051, abandoned.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004059112	A1	20040325	US 2003-406997	20030402
PRIORITY APPLN. INFO.:			US 1994-198449	B1 19940218
			US 2000-546877	B1 20000410
			US 2001-949051	B1 20010907

AB The present invention is directed to isolation and structure elucidation of newly discovered ecteinascidin (Et) compds., designated herein as Et 731, Et 745B, Et 815, Et 808, Et 596, Et 597, Et 583 and Et 594 from Ecteinascidia turbinata. The phys. properties of these compds., their preparation and bioactivities are also reported.

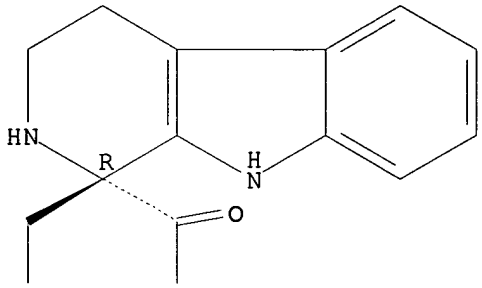
IT **675584-96-0P**, Ecteinascidin 808
RL: BSU (Biological study, unclassified); NPO (Natural product occurrence); PAC (Pharmacological activity); PRP (Properties); PUR (Purification or recovery); THU (Therapeutic use); BIOL (Biological study); OCCU (Occurrence); PREP (Preparation); USES (Uses)
(isolation, structure elucidation, and bioactivities of ecteinascidins from Ecteinascidia turbinata)

RN 675584-96-0 CAPLUS
CN Propanedial, [(1'R,6R,6aR,7R,13S,14S,16R)-5-(acetyloxy)-2',3',4',6,6a,7,9',13,14,16-decahydro-8-hydroxy-9-methoxy-4,10,23-

trimethyl-19-oxospiro[6,16-(epithiopropanoxymethano)-7,13-imino-12H-1,3-dioxolo[7,8]isoquino[3,2-b][3]benzazocine-20,1'-[1H]pyrido[3,4-b]indol]-14-yl]- (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

PAGE 1-A



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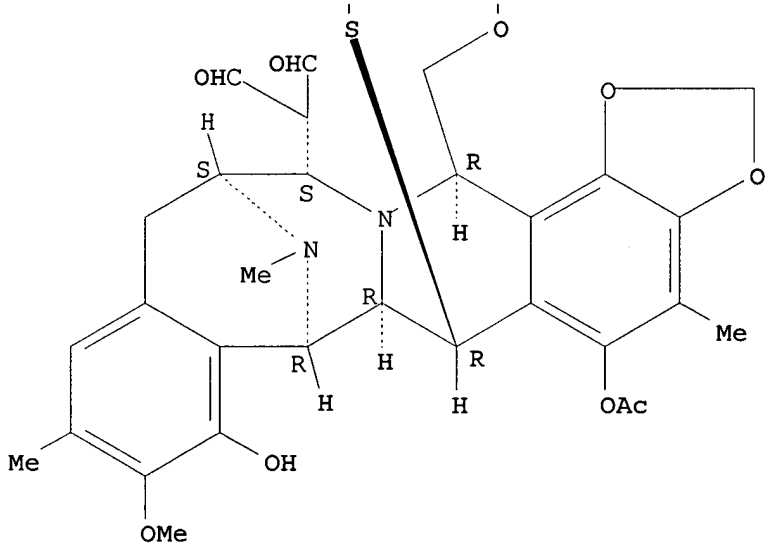


L7 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:581832 CAPLUS
DOCUMENT NUMBER: 135:166842
TITLE: Preparation of (1H-indol-5-yl)methanones, 2-(2-fluorophenyl)acetamides and 2-(pyrazol-1-

yl)pyrimidines as InhA inhibitors

INVENTOR(S): Staveski, Mark M.; Sneddon, Scott F.; Yee, Christopher; Janjigian, Andrew

PATENT ASSIGNEE(S): Genzyme Corporation, USA

SOURCE: PCT Int. Appl., 56 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

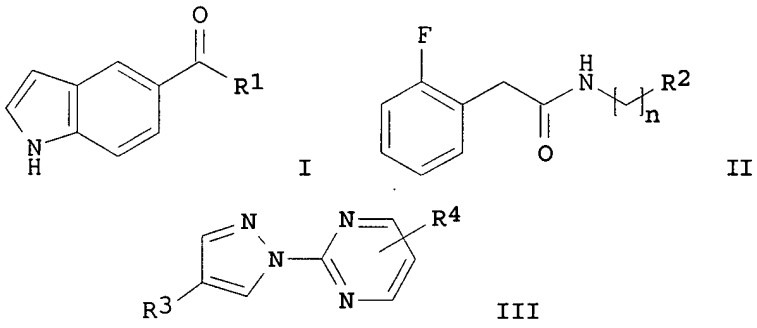
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001056974	A2	20010809	WO 2001-US40045	20010206
WO 2001056974	A3	20020718		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6372752	B1	20020416	US 2000-499183	20000207
PRIORITY APPLN. INFO.:			US 2000-499183	A1 20000207

OTHER SOURCE(S): MARPAT 135:166842

GI

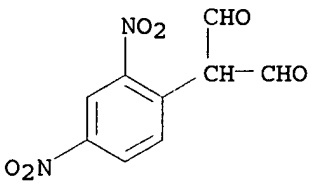


AB The title compds. [I-III, etc.; R1 = (un)substituted heteroaryl, piperazinyl, piperidinyl, etc.; R2 = OH, (un)substituted aryl, cycloalkyl, etc.; n = 1-2; R3 = (un)substituted Ph, heteroaryl; R4 = H, halo, alkyl, etc.] which inhibit the Mycobacterial enoyl-ACP reductase required for cell wall biosynthesis, and are useful for treating a bacterial infection in a patient, were prepared Thus, reacting 2-fluorophenylacetic acid with 4-chlorophenethylamine in the presence of DMAP and EDCI in CH2Cl2 afforded II [R2 = 4-ClC6H4; n = 2] which showed 82% InhA inhibition at 40 μM.

IT **353522-82-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of (1H-indol-5-yl)methanones, 2-(2-fluorophenyl)acetamides and 2-(pyrazol-1-yl)pyrimidines as InhA inhibitors)

RN 353522-82-4 CAPLUS

CN Propanedial, (2,4-dinitrophenyl)- (9CI) (CA INDEX NAME)



=> s l6 and (germicid? or antimicrob? or antibact? or disinfect? or steril? or antisept? or sanitiz? or pasteuriz? or decontaminate or deodor? or antibiotic or bactericidal or aseptic)

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          5158 GERMICID?
         62009 ANTIMICROB?
         83684 ANTIBACT?
         96527 DISINFECT?
         83249 STERIL?
         56531 ANTISEPT?
          2123 SANITIZ?
         11424 PASTEURIZ?
           842 DECONTAMINATE
         29975 DEODOR?
        122380 ANTIBIOTIC
         50906 BACTERICIDAL
          3884 ASEPTIC
L8           6 L6 AND (GERMICID? OR ANTIMICROB? OR ANTIBACT? OR DISINFECT? OR
               STERIL? OR ANTISEPT? OR SANITIZ? OR PASTEURIZ? OR DECONTAMINATE
               OR DEODOR? OR ANTIBIOTIC OR BACTERICIDAL OR ASEPTIC)
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 NEWS  6  OCT 13  New CAS Information Use Policies Effective October 17, 2005
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NEWS 10  OCT 27  EPFULL enhanced with additional content
NEWS 11  NOV 14  CA/CAplus - Expanded coverage of German academic research
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NEWS 15  DEC 14 2006 MeSH terms loaded for MEDLINE file segment of TOXCENTER
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                IPC reform
NEWS 19  DEC 23 New IPC8 SEARCH, DISPLAY, and SELECT fields in USPATFULL/USPAT2

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L1 53251 (?DIAL OR DIALDEHYDE) AND (GERMICID? OR BIOCID? OR INSECTICID? OR DISINFECT? OR STERILIZ? OR ANTIMICROBIAL? OR ANTIBACTERIAL? OR ANTIBIOTIC? OR ASEPTIC OR ANTISEPTIC)

=> s (dialdehyde) and (germicid? or biocid? or insecticid? or disinfect? or steriliz? or antimicrobial? or antibacterial? or antibiotic? or aseptic or antiseptic)
L2 2203 (DIALDEHYDE) AND (GERMICID? OR BIOCID? OR INSECTICID? OR DISINFECT? OR STERILIZ? OR ANTIMICROBIAL? OR ANTIBACTERIAL? OR ANTIBIOTIC? OR ASEPTIC OR ANTISEPTIC)

=> s dialdehyde(S)(germicid? or biocid? or insecticid? or disinfect? or steriliz? or antimicrobial? or antibacterial? or antibiotic? or aseptic or antiseptic)
L3 336 DIALDEHYDE(S)(GERMICID? OR BIOCID? OR INSECTICID? OR DISINFECT? OR STERILIZ? OR ANTIMICROBIAL? OR ANTIBACTERIAL? OR ANTIBIOTIC? OR ASEPTIC OR ANTISEPTIC)

=> d ibib abs l3 1-20

L3 ANSWER 1 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1050887 CAPLUS
DOCUMENT NUMBER: 143:353448
TITLE: Conjugated aliphatic **dialdehyde** **disinfecting** and **sterilizing** compositions and methods of using the same
INVENTOR(S): Bruckner, Norman I.; Satsangi, Rajiv Kumar
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 5 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005215649	A1	20050929	US 2004-810126	20040326
PRIORITY APPLN. INFO.:			US 2004-810126	20040326

AB A sterilizing and disinfecting solution is described which has a pH of less than 7 and contains an effective amount of 2-butenedial. The solution is used to sterilize or disinfect a surface in need of such treatment.

L3 ANSWER 2 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:634300 CAPLUS
TITLE: Solvent or matrix-mediated "molecular switches," the lipophilic **dialdehyde** (OPA) and the amphiphilic 1,3-phthalandiol and OPA **disinfection** mechanism
AUTHOR(S): Zhu, Peter C.; Roberts, Charles G.; Favero, Martin S.
CORPORATE SOURCE: Biocides Research, Advanced Sterilization Products, Irvine, CA, 92618, USA
SOURCE: Current Organic Chemistry (2005), 9(12), 1155-1166
CODEN: CORCFE; ISSN: 1385-2728
PUBLISHER: Bentham Science Publishers Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Ortho-Phthalaldehyde (OPA) has become the preferred choice over glutaraldehyde for use as a high-level disinfectant for hospital

instrument processing. Its superior antimicrobial performance is not well understood. To explain the exceptional microbicidal activity, a multi-step mechanism combining medium or solvent-induced mol. switching between the lipophilic dialdehyde OPA and the amphiphilic non-aldehyde form, 1,3-phthalandiol, is proposed based on chemical and spectral studies. In this model, OPA is a hydrophobe (the dialdehyde in "open" position) and 1,3-phthalandiol (in "locked" position), is a hydrophile. The amount of each which is present depends on the medium (or solvent) being employed. OPA exists as the dialdehyde in lipophilic media (or solvents) and becomes 1,3-phthalandiol in hydrophilic media (or solvents). These two forms can switch back and forth depending on the medium or solvent being used. The following mechanistic aspects of this model are discussed:. (1) the medium-induced mol. switching between OPA and 1,3-phthalandiol and cell-wall penetration via this mechanism;. (2) an OPA equilibrium moving in-and-out of the bacterial cell aided by a gradient driving force in combination with the mol. switching mechanism which assists significant penetration of OPA into the bacteria cells;. (3) the formation of significant amts. of amphiphilic 1,3-phthalandiol from OPA explains the moderate water solubility of OPA, low volatility, and suggests that a different biocidal mechanism operates vs. that of glutaraldehyde, and. (4) the SAM (self-assembled monolayer) hypothesis, which explains the first-step-attack of OPA on bacteria cell-walls via 1,3-phthalandiol. These observations may explain the superior bactericidal efficacy of OPA against glutaraldehyde-resistant mycobacteria.

REFERENCE COUNT: 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 3 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2005:546872 CAPLUS

DOCUMENT NUMBER: 143:65616

TITLE: Efficacy enhancers for aldehyde germicides using halide salts and optionally carbon dioxide

INVENTOR(S): Herruzo, Rafael; Zhu, Peter C.; Roberts, Charles G.; Tran, Yvonne

PATENT ASSIGNEE(S): Spain

SOURCE: U.S. Pat. Appl. Publ., 26 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005136086	A1	20050623	US 2003-741529	20031219
US 2005238732	A1	20051027	US 2004-1249	20041130
CA 2490047	AA	20050619	CA 2004-2490047	20041210
EP 1547621	A2	20050629	EP 2004-257929	20041217
EP 1547621	A3	20051019		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
JP 2005187471	A2	20050714	JP 2004-366305	20041217

PRIORITY APPLN. INFO.: US 2003-741529 A2 20031219

AB Disclosed herein are germicidal compns. and methods of using the germicidal compns. for disinfection and sterilization. In one aspect, a **germicidal** composition includes a **germicidal dialdehyde** and an efficacy enhancing halide salt to enhance the efficacy of the **dialdehyde.** One such composition may include water, phthalaldehyde, and an alkali metal halide salt to enhance the efficacy of the phthalaldehyde. In another aspect, a germicidal composition may include a carbonated germicidal solution containing dissolved phthalaldehyde. A method of forming the carbonated solution may include introducing carbon dioxide into the composition Thus an aqueous 0.55 w/v% phthalaldehyde solution contained (mM):

potassium fluoride 1000; dipotassium hydrogen phosphate 25; potassium dihydrogen phosphate 10; disodium EDTA 5; tetrasodium EDTA 5.

L3 ANSWER 4 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:355004 CAPLUS
DOCUMENT NUMBER: 142:448504
TITLE: High-strength **antibacterial** **dialdehyde** starch crosslinked chitosan film, its preparation and application
INVENTOR(S): Du, Yumin; Tang, Rupei; Fan, Lihong
PATENT ASSIGNEE(S): Wuhan University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1434072	A	20030806	CN 2003-118535	20030127

PRIORITY APPLN. INFO.: CN 2003-118535 20030127
AB The **antibacterial** **dialdehyde**-starch-crosslinked chitosan film is prepared from 1-3% chitosan/1-4% acetic acid solution with 2-7% **dialdehyde** starch solution (at a ratio of 100:1-10), and used as biomedical materials for decreasing the bacterial infection on trauma.

L3 ANSWER 5 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:275726 CAPLUS
DOCUMENT NUMBER: 142:342030
TITLE: **Dialdehyde**-releasing odorless nonirritating solid **antibacterial** compositions and their manufacture
INVENTOR(S): Ikeda, Masahiro; Soga, Manabu; Okunishi, Junji; Okamoto, Kazutake
PATENT ASSIGNEE(S): Maruishi Pharmaceutical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2005082574	A2	20050331	JP 2003-319705	20030911

PRIORITY APPLN. INFO.: JP 2003-319705 20030911
OTHER SOURCE(S): MARPAT 142:342030
AB Title compns., which release dialdehydes in water, are manufactured by dissolving or suspending R(CHO)2 (R = bond, C1-4 alkylene, C6H4), poly(vinylpyrrolidone) (I), and optional ED of buffer substances to adjust optimal pH, in aqueous media, then freeze or spray drying. The compns. are useful for disinfection of medical goods, endoscopes, etc. Thus, glutaraldehyde (II) and K 30 (I) were dissolved in water, adjusted to pH .apprx.8, freeze-dried, and dissolved in water to show antibacterial activity against Bacillus subtilis as strong as II.

L3 ANSWER 6 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:199178 CAPLUS
DOCUMENT NUMBER: 143:110848
TITLE: Fate of glutaraldehyde in hospital wastewater and combined effects of glutaraldehyde and surfactants on aquatic organisms
AUTHOR(S): Emmanuel, Evens; Hanna, Khalil; Bazin, Christine; Keck, Gerard; Clement, Bernard; Perrodin, Yves

CORPORATE SOURCE: Laboratoire des Sciences de l'Environnement, Ecole Nationale des Travaux Publics de l'Etat, Vaulx-en-Velin, 69518, Fr.
SOURCE: Environment International (2005), 31(3), 399-406
CODEN: ENVIDV; ISSN: 0160-4120
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Glutaraldehyde (GA), an aliphatic **dialdehyde disinfectant**, and surfactants, one of the major components of detergents, are widely used in hospitals in order to eliminate pathogenic organisms causing nosocomial infectious diseases. After their use, disinfectants and surfactants reach the wastewater network together. The discharge of chemical compds. from hospital activities into wastewater is also a well-known problem, causing pollution of water resources and constituting an ecol. risk for aquatic organisms. In this study, the chemical and toxicol. of GA and surfactant mixts. were reviewed in order to estimate their fate in aquatic ecosystems. Furthermore, their joint effects on aquatic organisms were exptl. assessed in the laboratory A simple model of the additive joint action of toxicants was used to determine combined acute toxicity effects on the bacteria luminescence and Daphnia mobility of three mixts. containing GA at 1.5+EC50 24 h [in mg/L] on Daphnia and anionic, cationic and nonionic surfactants at twice their critical micellar concentration (CMC). The mixture of GA and a cationic surfactant gave an EC50 30 min on Vibrio fischeri of 0.158%, with a concentration of 0.04 mg GA/L and 1.04 mg CTAB/L, which provided an additive action. The interaction between GA and an anionic surfactant on V. fischeri produced an antagonistic joint action with an EC50 30 min of 3.95%, containing 1.06 mg GA/L and 33.2 mg SDS/L. A synergistic action with an EC50 30 min of 8.4% on V. fischeri was observed for the mixture containing GA and a nonionic surfactant. Antagonistic interactions were observed for the joint action between GA and the surfactants studied on Daphnia. The mixture of GA and CTAB was more toxic (EC50 24 h=0.02%) than the two other mixts. (EC50 24 h GA+SDS=6%; EC50 24 h GA+TX 100=10%). This study provides new data on the toxicity of certain hospital pollutants entering the aquatic environment and detected in surface and groundwaters. It is necessary to study the joint effects of GA and surfactant mixts. following chronic and sublethal standard bioassays in order to estimate the contribution of the additive joint action models in assessing the environmental risk of hospital wastewater (HW).

REFERENCE COUNT: 66 THERE ARE 66 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 7 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2004:83332 CAPLUS
DOCUMENT NUMBER: 140:401734
TITLE: Assessing the potential efficacy of glutaraldehyde for biocide treatment of un-ballasted transoceanic vessels
AUTHOR(S): Sano, Larissa L.; Moll, Russell A.; Krueger, Ann M.; Landrum, Peter F.
CORPORATE SOURCE: Cooperative Institute for Limnology and Ecosystems Research, University of Michigan, Ann Arbor, MI, 48104, USA
SOURCE: Journal of Great Lakes Research (2003), 29(4), 545-557
CODEN: JGLRDE; ISSN: 0380-1330
PUBLISHER: International Association for Great Lakes Research
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Treating the ballast water of oceanic vessels with a biocide is one potential management strategy to reduce the number of nonindigenous species released into the Laurentian Great Lakes from NOBOB (no ballast on board) vessels. To evaluate **biocide** effectiveness, glutaraldehyde, a five-carbon **dialdehyde** widely used for its **antimicrobial** properties, was investigated. Biocide effectiveness was assessed for various organisms using 24 h acute toxicity bioassays in water-only and water-sediment environments. Acute studies indicate a 24 h LC90 value of

100 mg glutaraldehyde L-1 or less for most of the freshwater organisms tested. The main exception was the freshwater amphipod, Hyalella azteca, which was much more resistant to glutaraldehyde (24 h LC90 = 550 mg glutaraldehyde L-1; 95% CI: 476-681). Biocide efficacy was also evaluated in water-sediment exposures. The presence of a test sediment (3% organic carbon) greatly increased lethal concentration ests. for the oligochaete Lumbriculus variegatus, but not for H. azteca: The 24 h LC90 for L. variegatus varied depending on the water-sediment ratio, and ranged from 61 mg glutaraldehyde L-1 (95% CI 52-78) for an 8:1 water-sediment ratio to 356 mg glutaraldehyde L-1 (95% CI 322-423) for a 2:1 water-sediment ratio. This indicates that the amount of sediments present in NOBOB vessels may have a significant impact on biocide efficacy. Expts. using material from actual NOBOB vessels generally corroborated data from the water-sediment expts. and suggest a potential treatment concentration of approx. 500 mg glutaraldehyde L-1 for short exposure periods (e.g., 24 h).

REFERENCE COUNT: 49 THERE ARE 49 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 8 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:366526 CAPLUS
DOCUMENT NUMBER: 138:383523
TITLE: Method for treatment of onychocryptosis
INVENTOR(S): Tolstykh, M. P.; Promonenkov, V. K.; Mel'nichenko, V. I.; Petushkov, V. V.; Petushkov, D. V.; Tolstykh, P. I.; Duvanskii, V. A.
PATENT ASSIGNEE(S): Obshchestvo S Ogranichennoi Otvetstvennost'yu "Triniti Farma", Russia; Gosudarstvennyi Nauchnyi Tsentr Lazernoi Meditsiny
SOURCE: Russ., No pp. given
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2196618	C1	20030120	RU 2001-113988	20010525

PRIORITY APPLN. INFO.: RU 2001-113988 20010525

AB The method involves removing inflamed tissues of nail wall and built-in edge of the nail plate by applying longitudinal evaporation by means of focused laser beam. The nail bed is excised under the nail plate by means of focused laser beam propagating in parallel to nail phalanx. The periosteum is acted upon with defocused laser beam. Perforating openings are produced in the nail plate using laser beam. 2-5 sessions of magnetic impulse therapy are administered before and after surgical operation. The therapy involves using **antiseptic** napkins produced from **dialdehyde** cellulose wetted with physiol. salt solution having immobilized trypsin, Mexidol, or Mexidol and copper. The napkins are applied to the onychocryptosis area. Magnetic impulse field of 0.5-1.0 T units is applied.

L3 ANSWER 9 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:294484 CAPLUS
DOCUMENT NUMBER: 139:70653
TITLE: **Dialdehyde** starch-crosslinked chitosan films and their **antimicrobial** effects
AUTHOR(S): Tang, Rupei; Du, Yumin; Fan, Lihong
CORPORATE SOURCE: Department of Environmental Science, Wuhan University, Wuhan, 430072, Peop. Rep. China
SOURCE: Journal of Polymer Science, Part B: Polymer Physics (2003), 41(9), 993-997
CODEN: JPBPEM; ISSN: 0887-6266
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal

LANGUAGE: English

AB For improved mech. and water-swelling properties of chitosan films, a series of transparent films were prepared with dialdehyde starch as a crosslinking agent. Fourier transform IR and X-ray anal. results demonstrated that the formation of Schiff's base disturbed the crystallization of chitosan. The mech. properties and water-swelling properties of the films were significantly improved. The best values of the tensile strength and breaking elongation were 113.1 MPa and 27.0%, resp., when the dialdehyde starch content was 5%. All the crosslinked films still retained obvious antimicrobial effects toward S. aureus and E. coli, and they showed potential for biomedical applications.

REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 10 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2003:88434 CAPLUS

DOCUMENT NUMBER: 138:343826

TITLE: Method of producing a disinfectant

INVENTOR(S): Shnaider, S. A.; Kalakutskii, B. T.

PATENT ASSIGNEE(S): Russia

SOURCE: Russ., No pp. given
CODEN: RUXXE7

DOCUMENT TYPE: Patent

LANGUAGE: Russian

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2190426	C1	20021010	RU 2001-124764	20010907

PRIORITY APPLN. INFO.: RU 2001-124764 20010907

AB The method may be used for producing prepns. for disinfection of surfaces in accommodations, sanitary-engineering equipment, articles for nursing, including patients suffered from mycobacteriosis. The method involves preparation of **disinfectant** by mixing alkyldimethylbenzylammonium chloride, **dialdehyde** and monoat. alc. in aqueous solution of buffer agent with pH of 7.0-7.6 at the following ratio of components, mas.%: alkyldimethylbenzylammonium chloride, 3.0-15.0; **dialdehyde**, 2.0-12.0; monoat. alc., 0.5-10.0; aqueous solution of buffer agent, the balance.
For improving washing ability, nonionic surface active substance may be introduced in amount of 1.5-5.0 mas.% in the claimed disinfectant. The disinfectant has high specifity to Mycobacterium, Staphylococcus, and Escherichia coli and low toxicity.

L3 ANSWER 11 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 2002:745651 CAPLUS

DOCUMENT NUMBER: 138:165153

TITLE: Effects of egg disinfection and incubation temperature on early life stages of spotted wolf fish

AUTHOR(S): Hansen, T. K.; Falk-Petersen, I. B.

CORPORATE SOURCE: Norwegian College of Fishery Science, University of Tromso, Tromso, N-9037, Norway

SOURCE: Aquaculture International (2002), Volume Date 2001, 9(4), 333-344
CODEN: AQINFS; ISSN: 0967-6120

PUBLISHER: Kluwer Academic Publishers

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Eggs of spotted wolf fish (Anarhichas minor) were incubated at constant 4, 6 and 8°, and **disinfected** with glutaric **dialdehyde** (150 ppm for 5 min) once or twice a month during two-thirds of the incubation period, to prevent growth of microorganisms. Hatching of apparently normal larvae started earlier when eggs were disinfected twice

a month compared to once a month at all incubation temperature regimes. The time to 50% hatch was 900 and 920 day-degrees (16 and 16.5 wk) at 8°, 835 and 880 day-degrees (20 and 21 wk) at 6° and 725 and 800 day-degrees (26 and 28.5 wk) at 4°, in the egg groups disinfected twice or once a month, resp. The best survival until hatching was noted when eggs were disinfected twice a month and incubated at 6 and 8°. Survival was very low at 4°. Prematurely hatched larvae were registered in all egg groups disinfected twice a month and the highest frequency was noted in the 8° groups. The larval weight at normal hatching in the 6 and 8° groups was neg. correlated with incubation temperature and intervals of disinfection during the incubation period, but after 42 days feeding with live feed (unenriched Artemia) the wts. of the larvae were not significantly different. The specific growth rates of the larvae from the eggs incubated at 6° and 8° were 3.0% and 3.2%, resp. The mean survival of larvae was between 88% and 96% at 42 days post-hatching. Young wolf fish originating from the 6° incubation groups showed lowest mortality.

REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 12 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:511470 CAPLUS
DOCUMENT NUMBER: 137:386357
TITLE: Disinfecting detergent solution
PATENT ASSIGNEE(S): Zakrytoe Aktsionernoe Obshchestvo "Desko", Russia
SOURCE: Russ., No pp. given
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2173337	C1	20010910	RU 2000-130464	20001206

PRIORITY APPLN. INFO.: RU 2000-130464 20001206

AB A title solution, suitable for **disinfection** and presterilization cleaning, contains polyhexamethylene guanidine-HCl 0.025-3, alkylbenzyldimethylammonium chloride 0.006-3, a **dialdehyde** (glyoxal, succinic **dialdehyde** or glutaraldehyde) 0.02-3, nonionic surfactant (neonol) and H2O balance.

L3 ANSWER 13 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:80669 CAPLUS
DOCUMENT NUMBER: 136:107604
TITLE: Method for performing skin plastic operations
INVENTOR(S): Duvanskii, V. A.; Ryl'tsev, V. V.; Tolstykh, M. P.; Filatov, V. N.; Shin, F. E.; Kalinin, M. R.; Yusubaliev, M. K.; Tolstykh, P. I.; Petrin, S. A.
PATENT ASSIGNEE(S): Gosudarstvennyi Nauchnyi Tsentr Lazernoi Meditsiny MZ RF, Russia; Nauchno-Issledovatel'skii Institut Tekstil'nykh Materialov
SOURCE: Russ., No pp. given
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2158112	C1	20001027	RU 1999-113820	19990706

PRIORITY APPLN. INFO.: RU 1999-113820 19990706

AB The method involves applying free split dermal flap and covering the postoperative donor and operation wounds using antiseptic bandages.

Dialdehyde cellulose napkins containing copper and some antioxidant of vegetable origin as **antiseptic** bandages are applied. This results in enhanced effectiveness in reducing skin insemination with microbes, maintaining napkin sterility during the whole observation period.

L3 ANSWER 14 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:821852 CAPLUS
DOCUMENT NUMBER: 137:27812
TITLE: Absorption and excretion of [14C] ortho-phthalaldehyde following intratracheal and oral administration to male rat
AUTHOR(S): Ohtawa, Masakatsu; Ichimoto, Sumito; Nakaki, Rie; Sugimoto, Kenji
CORPORATE SOURCE: Regulatory Affairs Dep., Med. Company, Johnson & Johnson K.K., Japan
SOURCE: Japanese Pharmacology & Therapeutics (2001), 29(9), 611-621
CODEN: JPTABU
PUBLISHER: Raifu Saiensu Shuppan K.K.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Ortho-phthalaldehyde (OPA) is a new aromatic **dialdehyde antimicrobial** agent, the metabolic fate of which has been little studied. The objective of this study is to investigate the absorption and excretion of radioactivity following intratracheal and oral administration of [14C]OPA to the male rat. The compound was rapidly absorbed via both routes of administration. Cmax of the radioactivity after intratracheal and oral administration showed at 0.8 and 1.7 h, resp. T1/2 of the radioactivity at an initial phase after intratracheal dosing was estimated to be .apprx.6 h and that of T1/2 at an elimination phase (94 h) was similar to the value of T1/2 after oral dosing. The radioactivity was absorbed by 43% or more of the dose given via either the intratracheal or oral route of administration. The urinary and fecal excretion up to 72 h after oral administration was 43% and 50% of the dose, resp. The radioactivity equivalent of 2% of the dose given was detected in the carcass at 72 h. On the other hand, the percentage of urinary and fecal excretion until 72 h after intratracheal administration was 44% and 11%, resp. It might be partly excreted into the feces through the bile. The 41% of the dose given was detected in the carcass at 72 h. Urinary metabolites were analyzed using radio-HPLC. No unchanged form (parent compound) was detected. 2-Carboxybenzaldehyde (33%), unknowns (33% and 8%), and phthalic anhydride (4%) were detected as major metabolites.
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 15 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:766092 CAPLUS
DOCUMENT NUMBER: 136:395360
TITLE: Pancreatic islet-cell viability, functionality, and oxidative status remain unaffected at pharmacological concentrations of commonly used antibiotics in vitro
AUTHOR(S): Shewade, Yogita; Tirth, Suraj; Bhonde, R. R.
CORPORATE SOURCE: National Centre for Cell Sciences, Pune, 411 007, India
SOURCE: Journal of Biosciences (Bangalore, India) (2001), 26(3), 349-355
CODEN: JOBSDN; ISSN: 0250-5991
PUBLISHER: Indian Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Environmental factors such as diet, phys. activity, drugs, pollution, and life style play an important role in the progression and/or precipitation of diseases like diabetes, hypertension, obesity, and cardiovascular disorders. Indiscriminate use of antibiotics to combat infectious

diseases is 1 of the commonest forms of misuse of drugs. Antibiotics seem to have a correlation with diabetes and pancreatic function. There are controversial reports about the effect of antibiotics on the pancreatic islets; some suggesting their harmless action, some depicting a beneficial role, and others indicating deleterious effect. Moreover, use of antibiotics is mandatory during islet isolation and cultivation to reduce incidences of microbial contamination. It is likely that antibiotic treatment may adversely affect islet viability and its functioning leading to failure of islet transplantation. The present in vitro study was undertaken to examine the effect of commonly used antibiotics such as gentamycin, penicillin, streptomycin, tetracycline, neomycin, erythromycin, and chloramphenicol on islet viability, its functioning and induction of oxidative stress if any. The viability and insulin production data showed that none of the antibiotics used in the present study affect the viability and the functioning of the islets at their pharmacol. concns. Free radical levels measured in terms of malonyl-**dialdehyde** (MDA), NO, and reduced glutathione (GSH) reveal that except for a marginal increase in lipid peroxidn. with tetracycline and slight increase in NO levels with streptomycin, none of these **antibiotics** affect the oxidative status of the cells. Antioxidant enzymes such as superoxide dismutase and catalase remain unaffected after this treatment. The authors' results reveal the innocuous nature of the antibiotics used at pharmacol. concns., suggesting their safety whenever prescribed to combat infections and also during islet isolation procedures.

REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 16 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:627289 CAPLUS
DOCUMENT NUMBER: 135:170823
TITLE: Method of preparing dressing material
INVENTOR(S): Ryl'tsev, V. V.; Filatov, V. N.; Tolstykh, M. P.; Areyan, E. A.; Teplyashin, A. S.; Duvanskii, V. A.; Korabaev, U. M.
PATENT ASSIGNEE(S): Nauchno-Issledovatel'skii Institut Tekstil'nykh Materialov, Russia; Gosudarstvennyi Nauchnyi Tsentr Lazernoi Meditsiny MZ RF
SOURCE: Russ., No pp. given
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2143923	C1	20000110	RU 1998-120248	19981106

PRIORITY APPLN. INFO.: RU 1998-120248 19981106

AB A dressing for use in medicine, more particularly treatment of suppurative wounds, burns, trophic ulcers or other skin diseases, is disclosed. The dressing material has a wide spectrum of **antiseptic** properties; medicinal gauze is pre-oxidized to **dialdehyde** cellulose followed by immobilization of trypsin; the resulting matrix is washed with distilled water, dried and treated with 0.9-1.2% aqueous solution of decamethoxine of modulus 4-6 followed by squeezing to weight of 100-120 %.

L3 ANSWER 17 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:335744 CAPLUS
DOCUMENT NUMBER: 135:2840
TITLE: **Antimicrobial** activity of starch **dialdehyde** dithiosemicarbazone against Mycobacterium tuberculosis
AUTHOR(S): Para, Andrzej; Klisiewicz-Panszczyk, Teresa; Jurek, Irena

CORPORATE SOURCE: Department of Chemistry, University of Agriculture, Krakow, 31-120, Pol.
SOURCE: Acta Poloniae Pharmaceutica (2001), 58(1), 61-63
CODEN: APPHAX; ISSN: 0001-6837
PUBLISHER: Polish Pharmaceutical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A dithiosemicarbazone of 13% starch dialdehyde (DASTSC) was active against Mycobacterium tuberculosis under laboratory tests. M. tuberculosis strains sensitive and resistant to isoniazid (INH) were developed at the concns. of 2.5+10-4-5.0+10-1 mg/cm3 on a solid Lowenstein-Jensen medium and treated with 1-25 mg/cm3 of DASTSC in all mutual combinations of concns. Both, sensitive and resistant to INH strains reacted to DASTSC. The growth of strains could be completely inhibited as proved in 8-wk tests. The inhibition was non-linearly dependent on concentration of DASTSC. The lowest and the highest concns. of DASTSC did not inhibit the M. tuberculosis growth. The doses of DASTSC were optimized.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 18 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:838557 CAPLUS
DOCUMENT NUMBER: 134:128387
TITLE: A note: Ortho-phthalaldehyde: Proposed mechanism of action of a new antimicrobial agent
AUTHOR(S): Simons, C.; Walsh, S. E.; Maillard, J. -Y.; Russell, A. D.
CORPORATE SOURCE: Welsh School of Pharmacy, Cardiff University, Cardiff, CF10 3XF, UK
SOURCE: Letters in Applied Microbiology (2000), 31(4), 299-302
CODEN: LAMIE7; ISSN: 0266-8254
PUBLISHER: Blackwell Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Ortho-phthalaldehyde (OPA) is a new aromatic **dialdehyde** **antimicrobial** agent, the mechanism of action of which has been little studied. The aims of this paper are to examine what is currently known about its mechanism of action, to compare the action with that of a widely investigated aliphatic dialdehyde, glutaraldehyde (GTA), and to put forward a hypothesis that would, in the light of current knowledge, explain how OPA inactivates microorganisms, including GTA-resistant Mycobacterium chelonae.

REFERENCE COUNT: 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L3 ANSWER 19 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:178439 CAPLUS
DOCUMENT NUMBER: 132:181998
TITLE: Preparation of dichloroaldehyde-aminosilane emulsions for antibacterial fibers
INVENTOR(S): Wang, Xueping
PATENT ASSIGNEE(S): Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1189295	A	19980805	CN 1997-100529	19970128
CN 1069489	B	20010815		
PRIORITY APPLN. INFO.:			CN 1997-100529	19970128

AB The emulsion, used as **antibacterial** finishing agent for fiber

textile, is prepared by chlorinating **dialdehyde** such as 1,5-pentadialdehyde to obtain dichlorodialdehyde, mixing with the dichlorodialdehyde with aminosilane emulsion [such as (γ-aminopropyl)triethoxysilane], and diluting the emulsion with water.

L3 ANSWER 20 OF 336 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:505670 CAPLUS
DOCUMENT NUMBER: 131:134707
TITLE: **Disinfecting** and **sterilizing** concentrate containing an aromatic **dialdehyde** and a neutral pH buffering system
INVENTOR(S): Block, Phillip A.
PATENT ASSIGNEE(S): Ethicon, Inc., USA
SOURCE: U.S., 6 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5936001	A	19990810	US 1998-10351	19980121
CA 2259707	AA	19990721	CA 1999-2259707	19990120
EP 937395	A1	19990825	EP 1999-300392	19990120
EP 937395	B1	20030528		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2000001406	A2	20000107	JP 1999-48716	19990120
ES 2200467	T3	20040301	ES 1999-300392	19990120
AU 9913180	A1	19990812	AU 1999-13180	19990121
AU 747387	B2	20020516		
US 6071972	A	20000606	US 1999-320598	19990526

PRIORITY APPLN. INFO.: US 1998-10351 A 19980121

AB A **disinfecting** and **sterilizing** concentrate containing an aromatic **dialdehyde** and a neutral pH buffering system is provided. The aromatic dialdehyde is o-phthalaldehyde, isophthalaldehyde and terephthaldehyde. Aromatic dialdehyde concns. >5% weight/weight are achieved, while maintaining the stability of the buffering system. A method and a kit for preparing a disinfecting and sterilizing concentrate is also provided.

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> s l3 not (phthalaldehyde or isophthalaldehyde or terephthaldehyde or opa or glutaraldehyde or GTA)
L4 150 L3 NOT (PHTHALALDEHYDE OR ISOPHTHALALDEHYDE OR TEREPHTHALDEHYDE OR OPA OR GLUTARALDEHYDE OR GTA)

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PROCESSING COMPLETED FOR L4
L5 122 DUP REM L4 (28 DUPLICATES REMOVED)

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FILE 'CAPLUS, MEDLINE, BIOSIS, USPATFULL, EMBASE' ENTERED AT 11:01:24 ON 05 JAN 2006
L1 53251 S (?DIAL OR DIALDEHYDE) AND (GERMICID? OR BIOCID? OR INSECTICID
L2 2203 S (DIALDEHYDE) AND (GERMICID? OR BIOCID? OR INSECTICID? OR DISI
L3 336 S DIALDEHYDE(S)(GERMICID? OR BIOCID? OR INSECTICID? OR DISINFEC
L4 150 S L3 NOT (PHTHALALDEHYDE OR ISOPHTHALALDEHYDE OR TEREPHTHALDEH
L5 122 DUP REM L4 (28 DUPLICATES REMOVED)

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L5 ANSWER 1 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:1050887 CAPLUS
DOCUMENT NUMBER: 143:353448
TITLE: Conjugated aliphatic **dialdehyde** **disinfecting** and **sterilizing** compositions and methods of using the same
INVENTOR(S): Bruckner, Norman I.; Satsangi, Rajiv Kumar
PATENT ASSIGNEE(S): USA
SOURCE: U.S. Pat. Appl. Publ., 5 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2005215649	A1	20050929	US 2004-810126	20040326

PRIORITY APPLN. INFO.: US 2004-810126 20040326
AB A sterilizing and disinfecting solution is described which has a pH of less than 7 and contains an effective amount of 2-butenedial. The solution is used to sterilize or disinfect a surface in need of such treatment.

L5 ANSWER 2 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2005:275109 USPATFULL
TITLE: Means for inactivating pathogenic agents on surfaces, instruments and in contaminated fluids
INVENTOR(S): Nevermann, Eugen, Hamburg, GERMANY, FEDERAL REPUBLIC OF
Nevermann, Jan, Norderstedt, GERMANY, FEDERAL REPUBLIC OF
Zerling, Wolfgang, Kaltenkirchen, GERMANY, FEDERAL REPUBLIC OF
Hoeffler, Jutta, Hamburg, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005239671	A1	20051027	
APPLICATION INFO.:	US 2003-526128	A1	20020920	(10)
	WO 2002-EP10583		20020920	
			20050620	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2003-10240985	20020905

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BELL, BOYD & LLOYD, LLC, PO BOX 1135, CHICAGO, IL, 60690-1135, US
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
LINE COUNT: 373
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to ecologically-acceptable agent for treating pathogenic germs on surfaces, instruments and in fluids, comprising synergistic mixtures of aromatic hydroxybenzoic acids and phenols with a broad spectrum of action. The above is active against hydrophilically-sheathed and -unsheathed viruses as well as lipophilic bacteria and yeasts and is thus applicable in medicine, industry and commercial animal raising.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 3 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2005:261868 USPATFULL
TITLE: Antibacterial composition and methods of making and using the same
INVENTOR(S): Ghosh, Tirthankar, Oreland, PA, UNITED STATES
Weinstein, Barry, Dresher, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005227895	A1	20051013
APPLICATION INFO.:	US 2005-70908	A1	20050303 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-560675P	20040408 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ROHM AND HAAS COMPANY, PATENT DEPARTMENT, 100 INDEPENDENCE MALL WEST, PHILADELPHIA, PA, 19106-2399, US
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
LINE COUNT: 930
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Antimicrobial compositions and methods of making and using the same are disclosed. The disclosed antimicrobial compositions provide persistent, broad spectrum, antimicrobial activity. The antimicrobial compositions may be used in the preparation of antimicrobial articles. The antimicrobial compositions may also be used to inhibit the growth of microorganisms by introducing those compositions onto or into an environment subject to microbial attack.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 4 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2005:260893 USPATFULL
TITLE: Fiber substrate with antibacterial finish and methods of making and using the same
INVENTOR(S): Cottrell, Stephanie Nussbaum, Denver, NC, UNITED STATES
Ghosh, Tirthankar, Oreland, PA, UNITED STATES
Weinstein, Barry, Dresher, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005226914	A1	20051013
APPLICATION INFO.:	US 2005-82667	A1	20050317 (11)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2004-560675P	20040408 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: ROHM AND HAAS COMPANY, PATENT DEPARTMENT, 100 INDEPENDENCE MALL WEST, PHILADELPHIA, PA, 19106-2399, US
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
LINE COUNT: 1407
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Treated fiber substrates and methods of making and using the same are disclosed. The disclosed treated fiber substrates provide persistent, durable, broad spectrum, antimicrobial activity. The treated fiber substrates may be used in a variety of materials to impart antimicrobial activity thereto.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 5 OF 122 USPATFULL on STN

ACCESSION NUMBER:	2005:241441 USPATFULL
TITLE:	Novel 15-membered cyclic azalide, novel 16-membered cyclic diazalide derivative, and process for producing these
INVENTOR(S):	Miura, Tomoaki, c/o Pharmaceutical Research Center, 760, Morooka-cho, Kouhoku-ku, Yokohama-shi, Kanagawa, JAPAN 222-8567 Kurihara, Ken-ichi, Kawasaki-shi, JAPAN Yoshida, Takuji, Yokohama-shi, Kanagawa, JAPAN Ajito, Keiichi, Kawasaki-shi, Kanagawa, JAPAN
PATENT ASSIGNEE(S):	Meiji Seika Kaisha Ltd., Tokyo, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005209446	A1	20050922	
APPLICATION INFO.:	US 2003-504327	A1	20030225	(10)
	WO 2003-JP2035		20030225	
			20050418	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	JP 2003-2002049825	20020226

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	GREENBLUM & BERNSTEIN, P.L.C., 1950 ROLAND CLARKE PLACE, RESTON, VA, 20191, US
NUMBER OF CLAIMS:	20
EXEMPLARY CLAIM:	1
LINE COUNT:	3253

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A compound represented by the general formula (I) or a salt thereof which has excellent antibacterial activity (R.sub.1 represents hydrogen atom or an alkylcarbonyl group, R.sub.2 represents hydrogen atom, oxygen atom, hydroxyl group, or an alkylcarbonyloxy group, for example, when R.sub.2 is hydrogen atom, R.sub.3 represents group (a) (each of R.sub.5 and R.sub.6 represents hydrogen atom or an alkyl group), R.sub.4 represents hydrogen atom or group (c) (each of R.sub.8 and R.sub.9 represents hydrogen atom or an alkylcarbonyl group), and Me represents methyl group). ##STR1##

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 6 OF 122 USPATFULL on STN

ACCESSION NUMBER:	2005:202236 USPATFULL
TITLE:	Fiber assisted emulsion system
INVENTOR(S):	Willberg, Dean M., Moscow, RUSSIAN FEDERATION Dacar, Curt, Bakersfield, CA, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005175654	A1	20050811	
APPLICATION INFO.:	US 2005-105930	A1	20050414	(11)
RELATED APPLN. INFO.:	Division of Ser. No. US 2003-248675, filed on 7 Feb 2003, PENDING			

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-412430P	20020920 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	SCHLUMBERGER TECHNOLOGY CORPORATION, IP DEPT., WELL

STIMULATION, 110 SCHLUMBERGER DRIVE, MD1, SUGAR LAND, TX, 77478, US
NUMBER OF CLAIMS: 37
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Page(s)
LINE COUNT: 437
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Emulsions, either water-in-oil or oil-in-water, may be formed by combining an aqueous component, a non-aqueous component and a surfactant in combination with fibers. The fibers decrease the time and energy required to form the emulsion and, in some cases, allow emulsion formation that would not be possible with the use of such fibers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 7 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2005:184141 USPATFULL
TITLE: Stable polymer compositions and methods of making same
INVENTOR(S): Smith, Marvin McClinton, Philadelphia, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005159536	A1	20050721
APPLICATION INFO.:	US 2004-758963	A1	20040116 (10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: REED SMITH LLP, 2500 ONE LIBERTY PLACE, 1650 MARKET STREET, PHILADELPHIA, PA, 19103, US
NUMBER OF CLAIMS: 18
EXEMPLARY CLAIM: 1
LINE COUNT: 1213
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention comprises a polymer composition which is comprised of subcompositions which are separately stable within the polymer composition and methods of making the polymer compositions. These polymer compositions may be useful as coatings for paper, food packaging, vinyl, plastics, man-made substrates, wood and metal. An advantage of these polymer composition is that they are aqueous non-fluorocarbon polymers, which are less pollutive than state of the art polymer coatings.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 8 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2004:300093 USPATFULL
TITLE: Conformationally restricted polyamine analogs as disease therapies
INVENTOR(S): Frydman, Benjamin, Madison, WI, UNITED STATES
Marton, Laurence J., Fitchburg, WI, UNITED STATES
Reddy, Venodhar K., Madison, WI, UNITED STATES
Valasinas, Aldonia L., Madison, WI, UNITED STATES
Blokhin, Andrei V., Madison, WI, UNITED STATES
Basu, Hirak S., Madison, WI, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004235962	A1	20041125
APPLICATION INFO.:	US 2004-873100	A1	20040621 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-560711, filed on 27 Apr 2000, GRANTED, Pat. No. US 6794545

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-131779P	19990430 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MORRISON & FOERSTER LLP, 755 PAGE MILL RD, PALO ALTO, CA, 94304-1018
NUMBER OF CLAIMS: 9
EXEMPLARY CLAIM: CLM-01-23
NUMBER OF DRAWINGS: 56 Drawing Page(s)
LINE COUNT: 2528
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel conformationally restricted polyamine analogs are provided, as well as compositions comprising these novel polyamine analogs. Methods of using the novel polyamine analogs in treatment of diseases such as cancer are also provided. Also provided is a method of delivering these analogs specifically to tumor cells by covalently attaching polyamine analogs to porphyrin compounds, along with novel polyamine-porphyrin covalent conjugates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 9 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2004:260240 USPATFULL
TITLE: Method and kit for controlling bleeding
INVENTOR(S): Moore, Bob M., II, Nesbit, MI, UNITED STATES
Miller, Duane D., Germantown, TN, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004202735	A1	20041014
APPLICATION INFO.:	US 2003-411479	A1	20030408 (10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: HOWARD EISENBERG, ESQ., 2206 APPLEWOOD COURT, PERKASIE, PA, 18944
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
LINE COUNT: 395
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Methods and kits for controlling bleeding from a disrupted blood vessel, wherein a vanilloid receptor agonist is administered to the site of the disruption of the blood vessel in a quantity sufficient to control the bleeding.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 10 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2004:209922 USPATFULL
TITLE: Fiber Assisted Emulsion System
INVENTOR(S): Willberg, Dean M., 9 Taganskaya Ulitsa, Moscow, RUSSIAN FEDERATION 109004
Dacar, Curt, 4601 Polo View Drive, Bakersfield, CA, UNITED STATES 93312
PATENT ASSIGNEE(S): SCHLUMBERGER TECHNOLOGY CORPORATION, Sugar Land, RUSSIAN FEDERATION (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004162356	A1	20040819
APPLICATION INFO.:	US 2003-248675	A1	20030207 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2002-412430P	20020920 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: SCHLUMBERGER TECHNOLOGY CORPORATION, IP DEPT., WELL

STIMULATION, 110 SCHLUMBERGER DRIVE, MD1, SUGAR LAND, TX, 77478
NUMBER OF CLAIMS: 37
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 9 Drawing Page(s)
LINE COUNT: 438
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Emulsions, either water-in-oil or oil-in-water, may be formed by combining an aqueous component, a non-aqueous component and a surfactant in combination with fibers. The fibers decrease the time and energy required to form the emulsion and, in some cases, allow emulsion formation that would not be possible with the use of such fibers.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 11 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2004:193413 USPATFULL
TITLE: Methods and compositions for cleaning articles
INVENTOR(S): Stoessel, Steven, Niskayuna, NY, UNITED STATES
Fyvie, Thomas, Schenectady, NY, UNITED STATES
Hallman, Darren, Clifton Park, NY, UNITED STATES
Rocha, Teresa, Waterford, NY, UNITED STATES
Aggarwal, Renu, Schenectady, NY, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004148708	A1	20040805	
APPLICATION INFO.:	US 2003-354801	A1	20030130	(10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Charles W. Calkins Esq., Kilpatrick Stockton LLP, 1001 West Fourth Street, Winston-Salem, NC, 27101
NUMBER OF CLAIMS: 42
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Page(s)
LINE COUNT: 932
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides methods and compositions for cleaning using dual phase wash solutions. The dual phase wash solutions comprise emulsions of polar and non-polar solvents with emulsifiers, surfactants and detergents. The methods of the present invention comprise the steps of charging an article to a washing machine comprising a washing drum, exposing the article in the wash drum to a wash solution comprising 0.125 to 20 percent water; a detergent comprising an ionic surfactant, a non-ionic surfactant and an emulsifier; and decamethylcyclopentasiloxane, agitating the article and wash solution in the washing drum, draining the wash solution from the drum, optionally, adding a rinse solution comprising substantially the same components as the wash solution; agitating the article in the rinse solution; and separating the rinse solution from the article by allowing the rinse solution to drain out of the drum and spinning the drum to drive off residual rinse solution through centrifugal force.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 12 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2004:114618 USPATFULL
TITLE: Compositions and methods for preventing gel formation
INVENTOR(S): Stoessel, Steven, Niskayuna, NY, UNITED STATES
Aggarwal, Renu, Schenectady, NY, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004087464	A1	20040506	
APPLICATION INFO.:	US 2003-692104	A1	20031023	(10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2002-171312, filed on 13 Jun 2002, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Charles W. Calkins, Kilpatrick Stockton LLP, 1001 West Fourth Street, Winston-Salem, NC, 27101
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
LINE COUNT: 955
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to a cleaning composition comprising an emulsion comprising a polar co-solvent, a non-polar co-solvent, and an alkylamine dispersed throughout the emulsion. The alkylamine serves to prevent the emulsion from inverting and forming a thick, slippery gel, which is known to interfere with the cleaning process and washing machine components. Further, the present invention relates to a method for preventing gel formation by adding an alkylamine to an emulsified cleaning composition and washing stained articles therein.

In another aspect of the present invention a method for pre-treating a stained article is provided comprising applying a cleaning composition in the form of a gel comprising an emulsion of a polar co-solvent and a siloxane-based non-polar co-solvent, and a detergent to the article, allowing the cleaning composition to penetrate the stain; and laundering the article in a siloxane based cleaning composition comprising an alkylamine.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 13 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2004:19316 USPATFULL
TITLE: Composition and process for preparing herbal disinfectants and their use
INVENTOR(S): Khanuja, Suman Preet Singh, Uttar Pradesh, INDIA
Darokar, Mahendra Pandurang, Uttar Pradesh, INDIA
Santhakumar, Tirupadiripuliyur Ranganathan, Uttar Pradesh, INDIA
Shasany, Ajit Kumar, Uttar Pradesh, INDIA
Aggrawal, Krishna Kumar, Uttar Pradesh, INDIA
Ahmed, Atique, Uttar Pradesh, INDIA
Chaturvedi, Pushplata, Uttar Pradesh, INDIA
Gupta, Vivek Kumar, Uttar Pradesh, INDIA
Krishna, Alok, Uttar Pradesh, INDIA
Singh, Anil Kumar, Uttar Pradesh, INDIA
Bahl, Janak Raj, Uttar Pradesh, INDIA
Bansal, Ravi Prakash, Uttar Pradesh, INDIA
Kumar, Dinesh, Uttar Pradesh, INDIA
PATENT ASSIGNEE(S): COUNCIL OF SCIENTIFIC AND INDUSTRIAL, New Delhi, INDIA (non-U.S. corporation)
DEPARTMENT OF BIOTECHNOLOGY, A DEPARTMENT OF THE GOVERNMENT OF INDIA, New Delhi, INDIA (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2004014620	A1	20040122	
	US 6767876	B2	20040727	
APPLICATION INFO.:	US 2003-385154	A1	20030310	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	ID 2002-200200158	20020328

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MERCHANT & GOULD PC, P.O. BOX 2903, MINNEAPOLIS, MN,

55402-0903
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
LINE COUNT: 559
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention relates to disinfectant and cleansing compositions for cleaning the skin of humans and for cleaning surface such as floors, and the invention also provides process for the preparation of the said composition.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 14 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2004:235594 USPATFULL
TITLE: Conformationally restricted polyamine analogs as disease therapies
INVENTOR(S): Frydman, Benjamin, Madison, WI, United States
Marton, Laurence J., Madison, WI, United States
Reddy, Venodhar K., Madison, WI, United States
Valasinas, Aldonia, Madison, WI, United States
Blokhin, Andrei V., Madison, WI, United States
Basu, Hirak S., Madison, WI, United States
PATENT ASSIGNEE(S): SLIL Biomedical Corporation, Madison, WI, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6794545	B1	20040921
APPLICATION INFO.:	US 2000-560711		20000427 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-131779P	19990430 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Davis, Brian
LEGAL REPRESENTATIVE: Morrison & Foerster LLP
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 58 Drawing Figure(s); 56 Drawing Page(s)
LINE COUNT: 2676
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel conformationally restricted polyamine analogs are provided, as well as compositions comprising these novel polyamine analogs. Methods of using the novel polyamine analogs in treatment of diseases such as cancer are also provided. Also provided is a method of delivering these analogs specifically to tumor cells by covalently attaching polyamine analogs to, porphyrin compounds, along with novel polyamine-porphyrin covalent conjugates.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 15 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:366526 CAPLUS
DOCUMENT NUMBER: 138:383523
TITLE: Method for treatment of onychocryptosis
INVENTOR(S): Tolstykh, M. P.; Promonenkov, V. K.; Mel'nichenko, V. I.; Petushkov, V. V.; Petushkov, D. V.; Tolstykh, P. I.; Duvanskii, V. A.
PATENT ASSIGNEE(S): Obshchestvo S Ogranichennoi Otvetstvennost'yu "Triniti Farma", Russia; Gosudarstvennyi Nauchnyi Tsentr Lazernoi Meditsiny
SOURCE: Russ., No pp. given
CODEN: RUXXE7
DOCUMENT TYPE: Patent

LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2196618	C1	20030120	RU 2001-113988	20010525

PRIORITY APPLN. INFO.: RU 2001-113988 20010525

AB The method involves removing inflamed tissues of nail wall and built-in edge of the nail plate by applying longitudinal evaporation by means of focused laser beam. The nail bed is excised under the nail plate by means of focused laser beam propagating in parallel to nail phalanx. The periosteum is acted upon with defocused laser beam. Perforating openings are produced in the nail plate using laser beam. 2-5 sessions of magnetic impulse therapy are administered before and after surgical operation. The therapy involves using **antiseptic** napkins produced from **dialdehyde** cellulose wetted with physiol. salt solution having immobilized trypsin, Mexidol, or Mexidol and copper. The napkins are applied to the onychocryptosis area. Magnetic impulse field of 0.5-1.0 T units is applied.

L5 ANSWER 16 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2005:355004 CAPLUS
DOCUMENT NUMBER: 142:448504
TITLE: High-strength **antibacterial** **dialdehyde** starch crosslinked chitosan film, its preparation and application
INVENTOR(S): Du, Yumin; Tang, Rupei; Fan, Lihong
PATENT ASSIGNEE(S): Wuhan University, Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1434072	A	20030806	CN 2003-118535	20030127

PRIORITY APPLN. INFO.: CN 2003-118535 20030127

AB The **antibacterial** **dialdehyde**-starch-crosslinked chitosan film is prepared from 1-3% chitosan/1-4% acetic acid solution with 2-7% **dialdehyde** starch solution (at a ratio of 100:1-10), and used as biomedical materials for decreasing the bacterial infection on trauma.

L5 ANSWER 17 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2003:330522 USPATFULL
TITLE: Compositions and methods for cleaning
INVENTOR(S): Stoessel, Steven J., Niskayuna, NY, UNITED STATES
Mondello, Frank J., Niskayuna, NY, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003232737	A1	20031218
APPLICATION INFO.:	US 2002-171312	A1	20020613 (10)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Charles W. Calkins, Kilpatrick Stockton LLP, 1001 W. Fourth Street, Winston-Salem, NC, 27101
NUMBER OF CLAIMS: 25
EXEMPLARY CLAIM: 1
LINE COUNT: 709
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A composition is provided which comprises at least one non-polar solvent in an amount less than 100 percent based on the total weight of the

solution, at least one polar co-solvent in an amount up to 10 percent based on the total weight of the solution, at least one ionic surfactant, and at least one emulsifier in a sufficient amount to form a stable emulsion. The aforementioned composition may be employed to clean both polar and non-polar stains from various articles.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 18 OF 122 USPATFULL on STN

ACCESSION NUMBER:	2003:293932 USPATFULL
TITLE:	Wound dressings with elastase-sequestering
INVENTOR(S):	Cohen, Kelman I., Richmond, VA, UNITED STATES Diegelmann, Robert F., Richmond, VA, UNITED STATES Yager, Dorne, Chesterfield, VA, UNITED STATES Edwards, Judson Vincent, Mandeville, LA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003206944	A1	20031106
APPLICATION INFO.:	US 2003-446806	A1	20030529 (10)

RELATED APPLN. INFO.:	Continuation of Ser. No. US 2001-794227, filed on 28 Feb 2001, GRANTED, Pat. No. US 6599523 Continuation-in-part of Ser. No. US 2000-515172, filed on 29 Feb 2000, PENDING
DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	WHITHAM, CURTIS & CHRISTOFFERSON, P.C., 11491 SUNSET HILLS ROAD, SUITE 340, RESTON, VA, 20190
NUMBER OF CLAIMS:	13
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	6 Drawing Page(s)
LINE COUNT:	1357

AB The invention provides wound dressings and methods of their use, especially for the treatment of chronic, non-healing wounds. The wound dressings are composed of a support matrix, such as cotton cellulose, and an active agent associated with the support matrix. The active agent may be a protease inhibitor or a protease sequestrant, in particular an inhibitor or sequestrant of a neutrophil-derived cationic protease such as elastase.

L5 ANSWER 19 OF 122 USPATFULL on STN

ACCESSION NUMBER:	2003:200431 USPATFULL
TITLE:	MODULATORS OF METHYLATION FOR CONTROL OF BACTERIAL VIRULENCE
INVENTOR(S):	Xu, Mingxu, San Diego, CA, UNITED STATES Han, Quinghong, San Diego, CA, UNITED STATES Tan, Yuying, San Diego, CA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003138414	A1	20030724
	US 6632430	B2	20031014
APPLICATION INFO.:	US 2002-334532	A1	20021230 (10)

RELATED APPLN. INFO.:	Division of Ser. No. US 2000-591078, filed on 9 Jun 2000, ABANDONED

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-138307P	19990609 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Morrison & Foerster LLP, Suite 500, 3811 Valley Centre Drive, San Diego, CA, 92130-2332
NUMBER OF CLAIMS:	9

EXEMPLARY CLAIM: 1
LINE COUNT: 294
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods which ameliorate the virulence of bacterial infection are described wherein the active ingredient modulates transmethylation reactions in bacterial cells. Particularly useful compounds are inhibitors of S-adenosyl methionine synthetase (SAMS), of S-adenosyl homocysteine hydrolase (SAHH) and of transmethylases.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 20 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2003:195360 USPATFULL
TITLE: Absorbent article
INVENTOR(S): Whitmore, Darryl L., Chesapeake, VA, UNITED STATES
Engelhardt, Friedrich, Frankfurt/Main, GERMANY, FEDERAL REPUBLIC OF

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003135172	A1	20030717
APPLICATION INFO.:	US 2002-300082	A1	20021120 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-341254P	20011220 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MARSHALL, GERSTEIN & BORUN, 6300 SEARS TOWER, 233 SOUTH WACKER, CHICAGO, IL, 60606-6357
NUMBER OF CLAIMS: 16
EXEMPLARY CLAIM: 1
LINE COUNT: 2778
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A storage layer obtainable by a process including (a) forming a sprayable blend containing one or more superabsorbent forming monomers; superabsorbent polymer particles; water; and one or more initiators; (b) applying the sprayable blend to a fibrous web; and (c) subjecting the sprayed fibrous web to conditions under which the superabsorbent forming monomer polymerizes. The storage layer is used in absorbent articles to store aqueous fluids.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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L5 ANSWER 21 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2003:176436 USPATFULL
TITLE: Teat dip composition containing phenol and phenate
INVENTOR(S): Schattner, Robert I., Bethesda, MD, United States
PATENT ASSIGNEE(S): Sporicidin Company, Rockville, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6586477	B1	20030701
APPLICATION INFO.:	US 2002-284824		20021031 (10)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Henley, III, Raymond
LEGAL REPRESENTATIVE: Hovey Williams LLP
NUMBER OF CLAIMS: 39
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)

LINE COUNT: 521
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Aqueous germicidal compositions comprising a phenolic compound and a phenate and methods of treating animal skin with the compositions are provided. The compositions have a pH of from about 6-10 and comprise from about 1-2% by weight of a phenolic compound and a quantity of phenate to give a phenolic compound to phenate weight ratio of from about 0.81:1 to 10,000:1.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 22 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:294484 CAPLUS
DOCUMENT NUMBER: 139:70653
TITLE: **Dialdehyde** starch-crosslinked chitosan films and their **antimicrobial** effects
AUTHOR(S): Tang, Rupei; Du, Yumin; Fan, Lihong
CORPORATE SOURCE: Department of Environmental Science, Wuhan University, Wuhan, 430072, Peop. Rep. China
SOURCE: Journal of Polymer Science, Part B: Polymer Physics (2003), 41(9), 993-997
CODEN: JPBPEM; ISSN: 0887-6266
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB For improved mech. and water-swelling properties of chitosan films, a series of transparent films were prepared with dialdehyde starch as a crosslinking agent. Fourier transform IR and X-ray anal. results demonstrated that the formation of Schiff's base disturbed the crystallization of chitosan. The mech. properties and water-swelling properties of the films were significantly improved. The best values of the tensile strength and breaking elongation were 113.1 MPa and 27.0%, resp., when the dialdehyde starch content was 5%. All the crosslinked films still retained obvious antimicrobial effects toward S. aureus and E. coli, and they showed potential for biomedical applications.
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 23 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2003:88434 CAPLUS
DOCUMENT NUMBER: 138:343826
TITLE: Method of producing a disinfectant
INVENTOR(S): Shnaider, S. A.; Kalakutskii, B. T.
PATENT ASSIGNEE(S): Russia
SOURCE: Russ., No pp. given
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2190426	C1	20021010	RU 2001-124764	20010907
PRIORITY APPLN. INFO.:			RU 2001-124764	20010907

AB The method may be used for producing prepns. for disinfection of surfaces in accommodations, sanitary-engineering equipment, articles for nursing, including patients suffered from mycobacteriosis. The method involves preparation of **disinfectant** by mixing alkyldimethylbenzylammonium chloride, **dialdehyde** and monoat. alc. in aqueous solution of buffer agent with pH of 7.0-7.6 at the following ratio of components, mas.%: alkyldimethylbenzylammonium chloride, 3.0-15.0; **dialdehyde**, 2.0-12.0; monoat. alc., 0.5-10.0; aqueous solution of buffer agent, the balance.

For improving washing ability, nonionic surface active substance may be introduced in amount of 1.5-5.0 mas.% in the claimed disinfectant. The disinfectant has high specifity to Mycobacterium, Staphylococcus, and Escherichia coli and low toxicity.

L5 ANSWER 24 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2002:21858 USPATFULL
TITLE: Wound dressings with protease-lowering activity
INVENTOR(S): Cohen, Kelman I., Richmond, VA, UNITED STATES
Diegelmann, Robert F., Richmond, VA, UNITED STATES
Yager, Dorne, Chesterfield, VA, UNITED STATES
Edwards, Judson Vincent, Mandeville, LA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002012693	A1	20020131
	US 6599523	B2	20030729
APPLICATION INFO.:	US 2001-794227	A1	20010228 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-515172, filed on 29 Feb 2000, PENDING
DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: McGuireWoods, LLP, 1750 Tysons Blvd., Suite 1800, McLean, VA, 22102-4215
NUMBER OF CLAIMS: 13
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 1358
AB The invention provides wound dressings and methods of their use, especially for the treatment of chronic, non-healing wounds. The wound dressings are composed of a support matrix, such as cotton cellulose, and an active agent associated with the support matrix. The active agent may be a protease inhibitor or a protease sequestrant, in particular an inhibitor or sequestrant of a neutrophil-derived cationic protease such as elastase.

L5 ANSWER 25 OF 122 USPATFULL on STN
ACCESSION NUMBER: 2002:168244 USPATFULL
TITLE: Isothiazolone concentrates
INVENTOR(S): Petigard, Ramesh Balubhai, Hatfield, PA, United States
Garrett, Christine Elizabeth, Bensalem, PA, United States
PATENT ASSIGNEE(S): Rohm and Haas Company, Philadelphia, PA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6417211	B1	20020709
APPLICATION INFO.:	US 2000-629223		20000731 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-151507P	19990830 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Pryor, Alton
LEGAL REPRESENTATIVE: Howell, Thomas J.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 0 Drawing Figure(s); 0 Drawing Page(s)
LINE COUNT: 403
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Stable liquid microbicide compositions, having high concentrations of non-halogenated 3-isothiazolones, are disclosed. Aqueous concentrates

containing from 60 to 95% non-halogenated 3-isothiazolones provide excellent low temperature storage stability and good chemical stability, thus allowing enhanced flexibility in the preparation of less concentrated antimicrobial formulations.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 26 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:745651 CAPLUS
DOCUMENT NUMBER: 138:165153
TITLE: Effects of egg disinfection and incubation temperature on early life stages of spotted wolf fish
AUTHOR(S): Hansen, T. K.; Falk-Petersen, I. B.
CORPORATE SOURCE: Norwegian College of Fishery Science, University of Tromso, Tromso, N-9037, Norway
SOURCE: Aquaculture International (2002), Volume Date 2001, 9(4), 333-344
CODEN: AQINFS; ISSN: 0967-6120
PUBLISHER: Kluwer Academic Publishers
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Eggs of spotted wolf fish (Anarhichas minor) were incubated at constant 4, 6 and 8°, and **disinfected** with glutaric **dialdehyde** (150 ppm for 5 min) once or twice a month during two-thirds of the incubation period, to prevent growth of microorganisms. Hatching of apparently normal larvae started earlier when eggs were disinfected twice a month compared to once a month at all incubation temperature regimes. The time to 50% hatch was 900 and 920 day-degrees (16 and 16.5 wk) at 8°, 835 and 880 day-degrees (20 and 21 wk) at 6° and 725 and 800 day-degrees (26 and 28.5 wk) at 4°, in the egg groups disinfected twice or once a month, resp. The best survival until hatching was noted when eggs were disinfected twice a month and incubated at 6 and 8°. Survival was very low at 4°. Prematurely hatched larvae were registered in all egg groups disinfected twice a month and the highest frequency was noted in the 8° groups. The larval weight at normal hatching in the 6 and 8° groups was neg. correlated with incubation temperature and intervals of disinfection during the incubation period, but after 42 days feeding with live feed (unenriched Artemia) the wts. of the larvae were not significantly different. The specific growth rates of the larvae from the eggs incubated at 6° and 8° were 3.0% and 3.2%, resp. The mean survival of larvae was between 88% and 96% at 42 days post-hatching. Young wolf fish originating from the 6° incubation groups showed lowest mortality.
REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 27 OF 122 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 2002:194226 BIOSIS
DOCUMENT NUMBER: PREV200200194226
TITLE: Use of mechanism-based structure-activity relationships analysis in carcinogenic potential ranking for drinking water disinfection by-products.
AUTHOR(S): Woo, Yin-Tak; Lai, David; McLain, Jennifer L.; Manibusan, Mary Ko [Reprint author]; Dellarco, Vicki
CORPORATE SOURCE: Office of Water, U.S. EPA, 1200 Pennsylvania Ave. NW, MC-4607M, Washington, DC, 20460, USA
manibusan.mary@epa.gov
SOURCE: Environmental Health Perspectives, (February, 2002) Vol. 110, No. Supplement 1, pp. 75-87. print.
CODEN: EVHPAZ. ISSN: 0091-6765.
DOCUMENT TYPE: Article
General Review; (Literature Review)
LANGUAGE: English
ENTRY DATE: Entered STN: 13 Mar 2002

Last Updated on STN: 13 Mar 2002

AB Disinfection by-products (DBPs) are formed when disinfectants such as chlorine, chloramine, and ozone react with organic and inorganic matter in water. The observations that some DBPs such as trihalomethanes (THMs), di-/trichloroacetic acids, and 3-chloro-4-(dichloromethyl)-5-hydroxy-2(5H)-furanone (MX) are carcinogenic in animal studies have raised public concern over the possible adverse health effects of DBPs. To date, several hundred DBPs have been identified. To prioritize research efforts, an in-depth, mechanism-based structure-activity relationship analysis, supplemented by extensive literature search for genotoxicity and other data, was conducted for ranking the carcinogenic potential of DBPs that met the following criteria: a) detected in actual drinking water samples, b) have insufficient cancer bioassay data for risk assessment, and c) have structural features/alerts or short-term predictive assays indicative of carcinogenic potential. A semiquantitative concern rating scale of low, marginal, low-moderate, moderate, high-moderate, and high was used along with delineation of scientific rationale. Of the 209 DBPs analyzed, 20 were of priority concern with a moderate or high-moderate rating. Of these, four were structural analogs of MX and five were haloalkanes that presumably will be controlled by existing and future THM regulations. The other eleven DBPs, which included halonitriles (6), haloketones (2), haloaldehyde (1), halonitroalkane (1), and dialdehyde (1), are suitable priority candidates for future carcinogenicity testing and/or mechanistic studies.

L5 ANSWER 28 OF 122 USPATFULL on STN

ACCESSION NUMBER: 2001:186755 USPATFULL

TITLE: Method and composition for embalming

INVENTOR(S): Blake, Wayne Clayton, Wallingford, CT, United States
Simonelli, Richard Anthony, North Haven, CT, United States

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2001032381	A1	20011025	
	US 6601275	B2	20030805	
APPLICATION INFO.:	US 2001-790958	A1	20010222	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-183888P	20000222 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: John J. Daniels, Esq., 511 Foot Hills Road, Higganum, CT, 06441

NUMBER OF CLAIMS: 10

EXEMPLARY CLAIM: 1

LINE COUNT: 301

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for and a preservative composition for use in embalming a dead body to temporarily maintain a desirable state of non-decomposition. The method comprises the steps of draining blood from the circulatory system of a dead body; and injecting a preservative composition into the drained circulatory system of the dead body. The preservative composition consisting essentially of from 10 to 40% of each of the following components:

(a) a material selected from the group consisting of ascorbic acid, the sodium and potassium salts thereof and mixtures thereof;

(b) a material selected form the group consisting of citric acid, the sodium and potassium salts thereof and mixtures thereof;

(c) a material selected from the group consisting of sodium carbonate, potassium carbonate and mixtures thereof; and

(d) material selected from the group consisting of sodium and potassium sulfite, bisulfite, and metabisulfite and mixtures thereof.

The inventive preservative composition may further include skin treatment components comprises at least one of lanolin, carboxymethylcellulose, methymethacrylate gel, humectants, hydrolyzed proteins and a liquid crystalline carrier.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 29 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:766092 CAPLUS
DOCUMENT NUMBER: 136:395360
TITLE: Pancreatic islet-cell viability, functionality, and oxidative status remain unaffected at pharmacological concentrations of commonly used antibiotics in vitro
AUTHOR(S): Shewade, Yogita; Tirth, Suraj; Bhonde, R. R.
CORPORATE SOURCE: National Centre for Cell Sciences, Pune, 411 007, India
SOURCE: Journal of Biosciences (Bangalore, India) (2001), 26(3), 349-355
CODEN: JOBSDN; ISSN: 0250-5991
PUBLISHER: Indian Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Environmental factors such as diet, phys. activity, drugs, pollution, and life style play an important role in the progression and/or precipitation of diseases like diabetes, hypertension, obesity, and cardiovascular disorders. Indiscriminate use of antibiotics to combat infectious diseases is 1 of the commonest forms of misuse of drugs. Antibiotics seem to have a correlation with diabetes and pancreatic function. There are controversial reports about the effect of antibiotics on the pancreatic islets; some suggesting their harmless action, some depicting a beneficial role, and others indicating deleterious effect. Moreover, use of antibiotics is mandatory during islet isolation and cultivation to reduce incidences of microbial contamination. It is likely that antibiotic treatment may adversely affect islet viability and its functioning leading to failure of islet transplantation. The present in vitro study was undertaken to examine the effect of commonly used antibiotics such as gentamycin, penicillin, streptomycin, tetracycline, neomycin, erythromycin, and chloramphenicol on islet viability, its functioning and induction of oxidative stress if any. The viability and insulin production data showed that none of the antibiotics used in the present study affect the viability and the functioning of the islets at their pharmacol. concns. Free radical levels measured in terms of malonyl-**dialdehyde** (MDA), NO, and reduced glutathione (GSH) reveal that except for a marginal increase in lipid peroxidn. with tetracycline and slight increase in NO levels with streptomycin, none of these **antibiotics** affect the oxidative status of the cells. Antioxidant enzymes such as superoxide dismutase and catalase remain unaffected after this treatment. The authors' results reveal the innocuous nature of the antibiotics used at pharmacol. concns., suggesting their safety whenever prescribed to combat infections and also during islet isolation procedures.
REFERENCE COUNT: 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 30 OF 122 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 2003:285238 BIOSIS
DOCUMENT NUMBER: PREV200300285238
TITLE: Effects of egg disinfection and incubation temperature on early life stages of spotted wolffish.
AUTHOR(S): Hansen, T. K.; Falk-Petersen, I. B. [Reprint Author]

CORPORATE SOURCE: Norwegian College of Fishery Science, University of Tromso, N-9037, Tromso, Norway
ingerf@nfh.uit.no
SOURCE: Aquaculture International, (2001) Vol. 9, No. 4, pp. 333-344. print.
ISSN: 0967-6120.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 19 Jun 2003
Last Updated on STN: 19 Jun 2003

AB Eggs of spotted wolffish (Anarhichas minor Olafsen) were incubated at constant 4, 6 and 8degreeC, and **disinfected** with glutaric **dialdehyde** (150 p.p.m. for 5 min) once or twice a month during two thirds of the incubation period, to prevent growth of microorganisms. Hatching of apparently normal larvae started earlier when eggs were disinfected twice a month compared to once a month at all incubation temperature regimes. The time to 50% hatch was 900 and 920 day-degrees (16 and 16,5 weeks) at 8degreeC, 835 and 880 day-degrees (20 and 21 weeks) at 6degreeC and 725 and 800 day-degrees (26 and 28,5 weeks) at 4degreeC, in the egg groups disinfected twice or once a month, respectively. The best survival until hatching was noted when eggs were disinfected twice a month and incubated at 6 and 8degreeC. Survival was very low at 4degreeC. Prematurely hatched larvae were registered in all egg groups disinfected twice a month and the highest frequency was noted in the 8degreeC groups. The larval weight at normal hatching in the 6 and 8degreeC groups was negatively correlated with incubation temperature and intervals of disinfection during the incubation period, but after 42 days feeding with live feed (unenriched Artemia) the weights of the larvae were not significantly different. The specific growth rates of the larvae from the eggs incubated at 6degreeC and 8degreeC were 3.0% and 3.2%, respectively. The mean survival of larvae was between 88% and 96% at 42 days post-hatching. Young wolffish originating from the 6degreeC incubation groups showed lowest mortality.

L5 ANSWER 31 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 2001:335744 CAPLUS
DOCUMENT NUMBER: 135:2840
TITLE: **Antimicrobial** activity of starch **dialdehyde** dithiosemicarbazone against Mycobacterium tuberculosis
AUTHOR(S): Para, Andrzej; Klisiewicz-Panszczyk, Teresa; Jurek, Irena
CORPORATE SOURCE: Department of Chemistry, University of Agriculture, Krakow, 31-120, Pol.
SOURCE: Acta Poloniae Pharmaceutica (2001), 58(1), 61-63
CODEN: APPHAX; ISSN: 0001-6837
PUBLISHER: Polish Pharmaceutical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

AB A dithiosemicarbazone of 13% starch dialdehyde (DASTSC) was active against Mycobacterium tuberculosis under laboratory tests. M. tuberculosis strains sensitive and resistant to isoniazid (INH) were developed at the concns. of 2.5+10-4-5.0+10-1 mg/cm3 on a solid Lowenstein-Jensen medium and treated with 1-25 mg/cm3 of DASTSC in all mutual combinations of concns. Both, sensitive and resistant to INH strains reacted to DASTSC. The growth of strains could be completely inhibited as proved in 8-wk tests. The inhibition was non-linearly dependent on concentration of DASTSC. The lowest and the highest concns. of DASTSC did not inhibit the M. tuberculosis growth. The doses of DASTSC were optimized.

REFERENCE COUNT: 14 THERE ARE 14 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 32 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2002:80669 CAPLUS
DOCUMENT NUMBER: 136:107604

TITLE: Method for performing skin plastic operations
INVENTOR(S): Duvanskii, V. A.; Ryl'tsev, V. V.; Tolstykh, M. P.; Filatov, V. N.; Shin, F. E.; Kalinin, M. R.; Yusubaliev, M. K.; Tolstykh, P. I.; Petrin, S. A.
PATENT ASSIGNEE(S): Gosudarstvennyi Nauchnyi Tsentr Lazernoi Meditsiny MZ RF, Russia; Nauchno-Issledovatel'skii Institut Tekstil'nykh Materialov
SOURCE: Russ., No pp. given
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2158112	C1	20001027	RU 1999-113820	19990706

PRIORITY APPLN. INFO.: RU 1999-113820 19990706

AB The method involves applying free split dermal flap and covering the postoperative donor and operation wounds using antiseptic bandages. **Dialdehyde** cellulose napkins containing copper and some antioxidant of vegetable origin as **antiseptic** bandages are applied. This results in enhanced effectiveness in reducing skin insemination with microbes, maintaining napkin sterility during the whole observation period.

L5 ANSWER 33 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2001:627289 CAPLUS
DOCUMENT NUMBER: 135:170823
TITLE: Method of preparing dressing material
INVENTOR(S): Ryl'tsev, V. V.; Filatov, V. N.; Tolstykh, M. P.; Areyan, E. A.; Teplyashin, A. S.; Duvanskii, V. A.; Korabaev, U. M.
PATENT ASSIGNEE(S): Nauchno-Issledovatel'skii Institut Tekstil'nykh Materialov, Russia; Gosudarstvennyi Nauchnyi Tsentr Lazernoi Meditsiny MZ RF
SOURCE: Russ., No pp. given
CODEN: RUXXE7
DOCUMENT TYPE: Patent
LANGUAGE: Russian
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
RU 2143923	C1	20000110	RU 1998-120248	19981106

PRIORITY APPLN. INFO.: RU 1998-120248 19981106

AB A dressing for use in medicine, more particularly treatment of suppurative wounds, burns, trophic ulcers or other skin diseases, is disclosed. The dressing material has a wide spectrum of **antiseptic** properties; medicinal gauze is pre-oxidized to **dialdehyde** cellulose followed by immobilization of trypsin; the resulting matrix is washed with distilled water, dried and treated with 0.9-1.2% aqueous solution of decamethoxine of modulus 4-6 followed by squeezing to weight of 100-120 %.

L5 ANSWER 34 OF 122 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 2001:79025 BIOSIS
DOCUMENT NUMBER: PREV200100079025
TITLE: **Disinfecting** and **sterilizing** concentrate containing and aromatic **dialdehyde** and a neutral pH buffering system.
AUTHOR(S): Block, Philip A. [Inventor, Reprint author]
CORPORATE SOURCE: Double Oak, TX, USA
ASSIGNEE: Ethicon, Inc., Newark, DE, USA

PATENT INFORMATION: US 6071972 20000606
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (June 6, 2000) Vol. 1235, No. 1. e-file. CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 7 Feb 2001
Last Updated on STN: 12 Feb 2002

AB A **disinfecting** and **sterilizing** concentrate containing an aromatic **dialdehyde** and a neutral pH buffering system is provided. Aromatic dialdehyde concentrations of greater than 5 w/w % are achieved while maintaining the stability of the buffering system. A method and a kit for preparing a disinfecting and sterilizing concentrate is also provided.

L5 ANSWER 35 OF 122 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 1999:455137 BIOSIS
DOCUMENT NUMBER: PREV199900455137
TITLE: **Disinfecting** and **sterilizing** concentrate containing an aromatic **dialdehyde** and a neutral pH buffering system.
AUTHOR(S): Block, Phillip A. [Inventor, Reprint author]
CORPORATE SOURCE: Double Oak, TX, USA
ASSIGNEE: Ethicon, Inc.
PATENT INFORMATION: US 5936001 19990810
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Aug. 10, 1999) Vol. 1225, No. 2. print. CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 1 Nov 1999
Last Updated on STN: 1 Nov 1999

L5 ANSWER 36 OF 122 USPATFULL on STN
ACCESSION NUMBER: 1999:22085 USPATFULL
TITLE: Combinations and methods for reducing antimicrobial resistance
INVENTOR(S): Vermeulen, Nicolaas M. J., Woodinville, WA, United States
Schwartz, Dennis E., Redmond, WA, United States
PATENT ASSIGNEE(S): Oridigm Corporation, Seattle, WA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5872104		19990216	
APPLICATION INFO.:	US 1994-364246		19941227	(8)

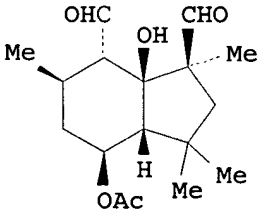
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Peselev, Elli
LEGAL REPRESENTATIVE: Arnold, White & Durkee
NUMBER OF CLAIMS: 132
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 5 Drawing Figure(s); 5 Drawing Page(s)
LINE COUNT: 4589
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Disclosed are novel methods, combinations of agents and kits for use in killing, or inhibiting the growth of, microorganisms. Enhanced antimicrobial action is provided by using a methylation inhibitor, as exemplified by using an agent that inhibits methylation or maturation of bacterial RNA in combination with, e.g., a macrolide lincosamide streptogramin B (MLS) antibiotic. The methods and compositions described may be employed to reduce the resistance of susceptible microorganisms to antimicrobial agents and thus to treat animals or patients with

infections.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 37 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 2
ACCESSION NUMBER: 1999:138145 CAPLUS
DOCUMENT NUMBER: 130:335067
TITLE: Structure-activity relationships of new phytotoxic metabolites with the botryane skeleton from Botrytis cinerea
AUTHOR(S): Duran-Patron, Rosa; Hernandez-Galin, Rosario; Rebordinos, Laureana G.; Cantoral, Jesus M.; Collado, Isidro G.
CORPORATE SOURCE: Departamento de Quimica Organica, Facultad de Ciencias, Universidad de Cadiz, Cadiz, 11510, Spain
SOURCE: Tetrahedron (1999), 55(8), 2389-2400
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



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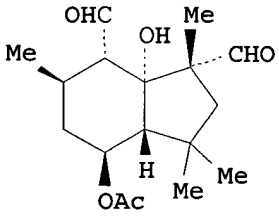

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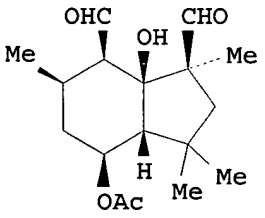

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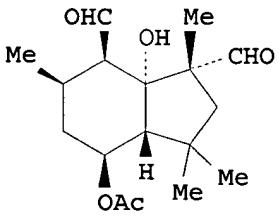

IV

AB The fungal antibiotic botrydial (I) and related compds. constitute an important group of metabolites whose biol. activity was not previously known in depth. The isolation, in addition to known compds., of three new epimer metabolites (II, III, and IV) with the botryane structure has allowed us to study the structure-activity relationships. The results suggest that, in addition to the presence of the **dialdehyde** functionality, the **antibiotic**, phytotoxic and cytostatic activities shown by some of these compds. are strongly correlated with the stereochem. of the C-1/C-8 **dialdehyde** moieties. The relative configuration (S) of the C-1 substituent seems to play a critical role in the binding of the substrate to the chemoreceptor.
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 38 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1998:210838 CAPLUS
DOCUMENT NUMBER: 128:231908
TITLE: Microemulsion or liquid-crystal all-purpose liquid disinfecting and cleaning compositions
INVENTOR(S): Blanvalet, Claude; Mondin, Myriam; Broze, Guy; Thomas, Barbara; Lambremont, Yves

PATENT ASSIGNEE(S): Colgate-Palmolive Co., USA
SOURCE: PCT Int. Appl., 40 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 25
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9813468	A1	19980402	WO 1997-US17401	19970926
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
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US 5861367	A	19990119	US 1996-722514	19960927
CA 2265831	AA	19980402	CA 1997-2265831	19970926
AU 9745991	A1	19980417	AU 1997-45991	19970926
AU 723559	B2	20000831		
EP 934400	A1	19990811	EP 1997-944515	19970926
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE, PT, IE, FI, RO				
NZ 334631	A	20000728	NZ 1997-334631	19970926
PL 186985	B1	20040430	PL 1997-332421	19970926

PRIORITY APPLN. INFO.:

US 1996-722514	A	19960927
US 1993-102314	B2	19930804
US 1993-155317	B2	19931122
US 1994-192118	B2	19940203
US 1994-336936	A2	19941115
US 1996-699299	A2	19960819
WO 1997-US17401	W	19970926

AB Liquid-crystalline or microemulsion compns. that are more environmentally friendly and are especially effective in the removal of oily and greasy soil contain anionic surfactant 0.1-20, glycerol alkoxylates and(or) their carboxylate esters 0.1-20, HCO(CH2)nCHO 0-10, water-insol. hydrocarbon or perfume 0.1-10, and cosurfactant 0.1-50%, with the balance being water. These compns. are effective in the absence of polyphosphate or other (in)organic builder salts and grease-removing solvents.
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L5 ANSWER 39 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 2000:178439 CAPLUS
DOCUMENT NUMBER: 132:181998
TITLE: Preparation of dichloroaldehyde-aminosilane emulsions for antibacterial fibers
INVENTOR(S): Wang, Xueping
PATENT ASSIGNEE(S): Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1189295	A	19980805	CN 1997-100529	19970128
CN 1069489	B	20010815		

PRIORITY APPLN. INFO.:

CN 1997-100529	19970128

AB The emulsion, used as **antibacterial** finishing agent for fiber textile, is prepared by chlorinating **dialdehyde** such as

1,5-pentadialdehyde to obtain dichlorodialdehyde, mixing with the dichlorodialdehyde with aminosilane emulsion [such as (γ-aminopropyl)triethoxysilane], and diluting the emulsion with water.

L5 ANSWER 40 OF 122 USPATFULL on STN
ACCESSION NUMBER: 1998:162510 USPATFULL
TITLE: Topical ketoconazole emulsions
INVENTOR(S): Francois, Marc Karel Jozef, Kalmthout, Belgium
Snoeckx, Eric Carolus Leonarda, Beerse, Belgium
PATENT ASSIGNEE(S): Janssen Pharmaceutica, N.V., Beerse, Belgium (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5854246		19981229	
	WO 9606613		19960307	
APPLICATION INFO.:	US 1997-793359		19970224	(8)
	WO 1995-EP3366		19950825	
			19970224	PCT 371 date
			19970224	PCT 102(e) date

	NUMBER	DATE
PRIORITY INFORMATION:	EP 1994-202505	19940901

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: MacMillan, Keith D.
LEGAL REPRESENTATIVE: Appollina, Mary
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 390
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention concerns stable emulsions comprising ketoconazole having a pH in the range from 6 to 8, characterized in that the emulsions lack sodium sulfite as an antioxidant; process of preparing said emulsions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> FIL STNGUIDE

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	273.07	273.28

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-24.75	-24.75

FILE 'STNGUIDE' ENTERED AT 11:34:01 ON 05 JAN 2006
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Dec 30, 2005 (20051230/UP).

=> d ibib abs l5 41-60
YOU HAVE REQUESTED DATA FROM FILE 'CAPLUS, MEDLINE, BIOSIS, USPATFULL, EMBASE' -
CONTINUE? (Y)/N:y

L5 ANSWER 41 OF 122 USPATFULL on STN
ACCESSION NUMBER: 97:47041 USPATFULL
TITLE: Biocomposite material and method of making

INVENTOR(S): Riebel, Michael J., Mankato, MN, United States
Torgusen, Paul L., New Ulm, MN, United States
Roos, Kenneth D., Nicollet, MN, United States
Anderson, Donald E., Northfield, MN, United States
Gruber, Carl, Le Seur, MN, United States
PATENT ASSIGNEE(S): Phenix Biocomposites, Inc., St. Peter, MN, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5635123		19970603
APPLICATION INFO.:	US 1995-487498		19950607 (8)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1994-258187, filed on 10 Jun 1994 And a continuation-in-part of Ser. No. US 1994-211567, filed on 2 May 1994 which is a continuation-in-part of Ser. No. US 1992-928965, filed on 11 Aug 1992, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Simmons, David A.
ASSISTANT EXAMINER: Mayes, M. Curtis
LEGAL REPRESENTATIVE: Mueting, Raasch, Gebhardt & Schwappach, P.A.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 18
NUMBER OF DRAWINGS: 7 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 2439
AB Fiber-reinforced protein-based biocomposite particulate material containing a legume-based thermosetting resin and cellulosic material, and rigid biocomposite pressure-formed materials produced therefrom, are provided. The particulate material and resultant pressure-formed materials contain the legume-based resin and fibrous cellulosic material in amounts such that the ratio of cellulose solids to resin solids is about 0.8:1.0 to about 1.5:1.0. Particularly preferred pressure-formed materials also include a secondary thermosetting binder, such as an isocyanate.

L5 ANSWER 42 OF 122 USPATFULL on STN
ACCESSION NUMBER: 97:3477 USPATFULL
TITLE: Biocomposite material and method of making
INVENTOR(S): Riebel, Michael J., Mankato, MN, United States
Torgusen, Paul L., New Ulm, MN, United States
Roos, Kenneth D., Nicollet, MN, United States
Anderson, Donald E., Northfield, MN, United States
Gruber, Carl, Le Seur, MN, United States
PATENT ASSIGNEE(S): Phenix Biocomposites, Inc., St. Peter, MN, United States (U.S. corporation)

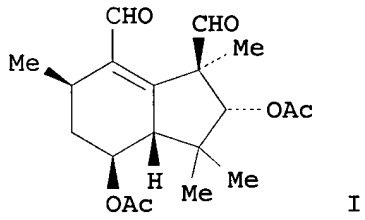
	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5593625		19970114
APPLICATION INFO.:	US 1994-258187		19940610 (8)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1994-211567, filed on 11 Apr 1994 which is a continuation-in-part of Ser. No. US 1992-928965, filed on 11 Aug 1992
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Simmons, David A.
ASSISTANT EXAMINER: Mayes, M. Curtis
LEGAL REPRESENTATIVE: Mueting, Raasch, Gebhardt & Schwappach, P.A.
NUMBER OF CLAIMS: 58
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Figure(s); 6 Drawing Page(s)
LINE COUNT: 2556
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Fiber-reinforced protein-based biocomposite particulate material containing a legume-based thermosetting resin and cellulosic material, and rigid biocomposite pressure-formed materials produced therefrom, are provided. The particulate material and resultant pressure-formed materials contain the legume-based resin and fibrous cellulosic material in amounts such that the ratio of cellulose solids to resin solids is about 0.8:1.0 to about 1.5:1.0. Particularly preferred pressure-formed materials also include a secondary thermosetting binder, such as an isocyanate.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 43 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 1997:590702 CAPLUS
DOCUMENT NUMBER: 127:275114
TITLE: New botrydial sesquiterpenoids from Hymenoscyphus epiphyllus
AUTHOR(S): Thines, Eckhard; Anke, Heidrun; Steglich, Wolfgang; Sterner, Olov
CORPORATE SOURCE: Universitat Kaiserslautern, Kaiserslautern, D-67663, Germany
SOURCE: Zeitschrift fuer Naturforschung, C: Biosciences (1997), 52(7/8), 413-420
CODEN: ZNCBDA; ISSN: 0341-0382
PUBLISHER: Verlag der Zeitschrift fuer Naturforschung
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



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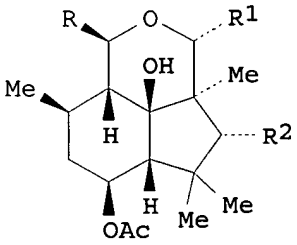


II R=R2=OH, R1=H
III R=OMe, R1=H, R2=OH
IV R=R1=OMe, R2=OAc

AB Four new botrydial derivs., hymendial (I), 7α-hydroxydihydrobotrydial (II), 7α-hydroxy-10-O-methyldihydrobotrydial (III), and 7α-acetoxy-15α-methoxy-10-O-methyl-dihydrobotrydial (IV) were isolated together with dihydrobotrydial from the culture fluid of the ascomycete Hymenoscyphus epiphyllus. In addition, cytochalasin H, 18-deoxycytochalasin H and (+)-mellein were produced by this fungus. I, possessing an α,β-unsatd. **dialdehyde** functionality, exhibits **antimicrobial** and cytotoxic activities and is mutagenic in the Ames Salmonella assay.

L5 ANSWER 44 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1999:282432 CAPLUS
DOCUMENT NUMBER: 131:73805

TITLE: Synthetic studies on macrocarpals
AUTHOR(S): Tanaka, Tetsuaki; Mikamiyama, Hidenori; Maeda, Kimiya; Iwata, Chuzo; Ishida, Toshimasa
CORPORATE SOURCE: Faculty of Pharmaceutical Sciences, Osaka University, Osaka, Japan
SOURCE: Tennen Yuki Kagobutsu Toronkai Koen Yoshishu (1997), 39th, 295-300
CODEN: TYKYDS
PUBLISHER: Nippon Kagakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB Macrocarpals are structurally characterized by isopentyl phloroglucinol **dialdehyde** fused to various sesquiterpene skeletons, and are known to show several interesting biol. activities such as **antibacterial** activity, inhibitory activity of HIV-RTase, aldose reductase, and glucosyltransferase. The authors describe herein the first stereoselective total synthesis of macrocarpal C and have revealed that it is identical with macrocarpal G, whose planar structure only has been reported.

L5 ANSWER 45 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:341767 CAPLUS
DOCUMENT NUMBER: 127:132190
TITLE: Structure-activity relationships for unsaturated dialdehydes. Part 11. The reactivity of the antibiotic sesquiterpene isovelleral towards primary amines
AUTHOR(S): Gustafsson, J.; Jonassohn, M.; Kahnberg, P.; Anke, H.; Sterner, O.
CORPORATE SOURCE: Dep. Organic Chem. 2, Lund Univ., Lund, S-22100, Swed.
SOURCE: Natural Product Letters (1997), 9(4), 253-258
CODEN: NPLEEF; ISSN: 1057-5634
PUBLISHER: Harwood
DOCUMENT TYPE: Journal
LANGUAGE: English
AB The comparison of the **antibiotic** activity of isovelleral and 2 synthetic compds. with data from mol. mechanics calcns., suggest that the reaction of isovelleral with amines to form pyrrole derivs., as previously was observed with the **dialdehyde** polygodial, may be responsible for its bioactivities. Isovelleral was found to react with 1,3-diaminopropane in ethanol, and a pyrrole derivative was isolated and characterized. However, the reaction was slow and several other products were also formed, and polygodial, which is as antibiotic as isovelleral, reacts more than 100 times faster with propylamine and lysine. It is therefore unlikely that the reaction with primary amines to form pyrrole derivs. is responsible for the antibiotic activity of isovelleral.

L5 ANSWER 46 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:721695 CAPLUS
DOCUMENT NUMBER: 128:20447
TITLE: Information on glutaric **dialdehyde** **biocide** tested in lab and circulating cooling water
AUTHOR(S): Lu, Qi
CORPORATE SOURCE: Water Treatment Center, Shanghai Petrochemical Corp., Shanghai, 200540, Peop. Rep. China
SOURCE: Gongye Shuichuli (1997), 17(2), 20-21
CODEN: GOSHFA; ISSN: 1005-829X
PUBLISHER: Gongye Shuichuli Zazhishe
DOCUMENT TYPE: Journal
LANGUAGE: Chinese
AB The **biocidal** property of non-oxidizing **biocide** -glutaric **dialdehyde**-containing **biocides** was tested in laboratory and circulating cooling water system. The effects of pH on the **biocide** property and glutaric **dialdehyde** on the inhibition performance of phosphorus corrosion inhibitor were discussed.

The result showed that the biocides has excellent germicidal effect on bacteria in cooling water and good compatibility with phosphorus compds.

L5 ANSWER 47 OF 122 MEDLINE on STN DUPLICATE 4
ACCESSION NUMBER: 97478842 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9412018
TITLE: [The membrane phospholipid peroxidation and Ca-dependent ATPase activity of the microsomal fractions isolated from rat renal tissue in thermal ischemia with and without alpha-tocopherol protection].
Perekisnoe okislenie membrannykh fosfolipidov i Ca-zavisimaia ATFaznaia aktivnost' mikrosomnykh fraktsii, vydelennykh iz pochechnoi tkani krys pri teplovoi ishemii bez protektsii i s protektsiei al'fa-tokoferolom.
AUTHOR: Golod E A
SOURCE: Urologiia i nefrologiia, (1997 Sep-Oct) (5) 5-9.
Journal code: 0032352. ISSN: 0042-1154.
PUB. COUNTRY: RUSSIA: Russian Federation
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Russian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199712
ENTRY DATE: Entered STN: 19980109
Last Updated on STN: 19980109
Entered Medline: 19971201

AB The author studied the effects of 30-min heat ischemia of rat kidneys on the level of malonic **dialdehyde** (MDA) and Ca-dependent ATPase activity of microsomal fraction isolated from the cortical substance in the presence and absence of **antibiotic** alameticine and ortovandate in the incubation medium and protective action on Ca-ATPase activity of rat pretreatment with alpha-tocopherol (TP). It has been demonstrated that thermal ischemia induces inhibition of Ca-ATPase activity of microsomes resistant to vanadate. Administration of TP reduced MDA level, enhanced Ca-ATPase microsomal activity in the presence of alameticine against inhibition of enzymic activity in the absence of alameticine. This indicates a rise in the true enzyme activity under decreasing membrane permeability in conditions of diminishing activity of lipid peroxidation in response to TP effects.

L5 ANSWER 48 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:531717 CAPLUS
DOCUMENT NUMBER: 125:185856
TITLE: Combination for reducing antimicrobial resistance using a methylation inhibitor in combination with an antibiotic
INVENTOR(S): Vermeulen, Nicolaas M. J.; Schwartz, Dennis E.
PATENT ASSIGNEE(S): Oridigm Corporation, USA
SOURCE: PCT Int. Appl., 202 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9620010	A1	19960704	WO 1995-US16677	19951215
W: AL, AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5872104	A	19990216	US 1994-364246	19941227

AU 9646045	A1	19960719	AU 1996-46045		19951215
PRIORITY APPLN. INFO.:			US 1994-364246	A	19941227
			WO 1995-US16677	W	19951215

AB Methods, combinations of agents, and kits are disclosed for use in killing or inhibiting the growth of microorganisms. Enhanced antimicrobial action is provided by using a methylation inhibitor, as exemplified by using an agent that inhibits methylation or maturation of bacterial RNA in combination with, e.g., a macrolide lincosamide streptogramin B (MLS) antibiotic. The methods and compns. described may be employed to reduce the resistance of susceptible microorganisms to antimicrobial agents and thus to treat animals or patients with infections.

L5 ANSWER 49 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:391632 CAPLUS
DOCUMENT NUMBER: 125:58986
TITLE: Preparation of water-soluble polyene antibiotic-polysaccharide conjugates as antifungals.
INVENTOR(S): Linden, Galina; Domb, Abraham J.; Polacheck, Itzhack; Benita, Shimon
PATENT ASSIGNEE(S): Helfgott and Karas, P. C., USA; Yissum Research Development Company of the Hebrew University
SOURCE: PCT Int. Appl., 33 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9605212	A1	19960222	WO 1995-US10522	19950816
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
US 5567685	A	19961022	US 1994-291292	19940816
IL 114796	A1	20000217	IL 1995-114796	19950801
AU 9533673	A1	19960307	AU 1995-33673	19950816
EP 776329	A1	19970604	EP 1995-930205	19950816
EP 776329	B1	20030102		
R: DE, FR, GB, IT				
JP 10504347	T2	19980428	JP 1995-507622	19950816

PRIORITY APPLN. INFO.:			US 1994-291292	A	19940816
			WO 1995-US10522	W	19950816

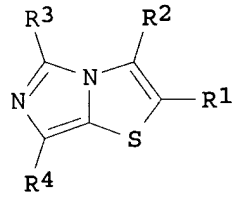
AB A substantially stable H2O-soluble conjugate of a polysaccharide and an unoxidized, biol. active polyene antibiotic, conjugated to the polysaccharide by an imine or amine bond, is claimed. Thus, dextran-40 was oxidized with KIO4 in H2O for 2 h to give dialdehyde dextran (DAD), which was purified on Dowex-1. The DAD solution was stirred with nystatin in borate buffer at pH 8.9 for 16 h to give the H2O-soluble (100 mg/mL) imine conjugate in ≥95% yield. The conjugate had >2 times the activity of nystatin itself against various fungi.

L5 ANSWER 50 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1997:85070 CAPLUS
DOCUMENT NUMBER: 126:103952
TITLE: Preparation of imidazo[5,1-b]thiazole derivatives as intermediates for antibacterial cephems
INVENTOR(S): Atsumi, Kunio; Umemura, Eijiro; Kano, Juko; Shiokawa, Munejiro; Kudo, Toshiaki; Tsushima, Masaki; Iwamatsu, Katsuyoshi; Aihara, Kazuhiro; Amano, Kazuko; Takizawa, Hiromasa

PATENT ASSIGNEE(S): Meiji Seika Co., Japan; Meiji Seika Kaisha Ltd.
SOURCE: Jpn. Kokai Tokkyo Koho, 62 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 08311071	A2	19961126	JP 1996-51280	19960308
JP 3527003	B2	20040517		

PRIORITY APPLN. INFO.: JP 1995-51644 A 19950310
OTHER SOURCE(S): MARPAT 126:103952
GI



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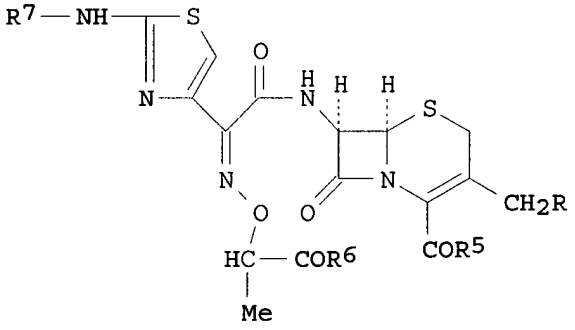

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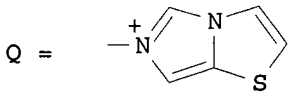

AB Title compds. I [R1-R4 = H, alkyl, alkoxy, etc.] are prepared as intermediates for antibacterial cephems. Thus, 2-(formylamino)methylthiazole in CH2Cl2 was treated with phosphorus oxychloride at room temperature to give the title compound imidazo[5,1-b]thiazole.
Reaction of this with cephem II [R = Cl, R5 = O-CH2-C6H4-OMe-p, R6 = O-CHPh2, R7 = trityl] in acetone containing NaI followed by treatment with anisole-CF3COOH to give II [R = Q, R5 = O-, R6 = OH, R7 = H] is also demonstrated. This cephem derivative showed 6.25 μg/mL inhibition against Staphylococcus aureus.

L5 ANSWER 51 OF 122 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 2002:33594 BIOSIS
DOCUMENT NUMBER: PREV200200033594
TITLE: Stable **antimicrobial dialdehyde** composition and methods of use.

AUTHOR(S): Donovan, D. J. [Inventor]; McSherry, D. D. [Inventor]; Fredell, D. L. [Inventor]
CORPORATE SOURCE: St. Paul, Minn., USA
ASSIGNEE: ECOLAB INC.
PATENT INFORMATION: US 5480643 19960102
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (Jan. 2, 1996) Vol. 1182, No. 1, pp. 353. print.
CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
LANGUAGE: English
ENTRY DATE: Entered STN: 26 Dec 2001
Last Updated on STN: 25 Feb 2002

L5 ANSWER 52 OF 122 USPATFULL on STN
ACCESSION NUMBER: 96:97023 USPATFULL
TITLE: Water-Soluble polyene conjugate
INVENTOR(S): Linden, Galina, Rishon LeZion, Israel
Domb, Abraham J., Efrat, Israel
Polacheck, Itzhack, Jerusalem, Israel
Benita, Shimon, Jerusalem, Israel
PATENT ASSIGNEE(S): Yissum Research Development Company of the Hebrew University of Jerusalem, Jerusalem, Israel (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5567685		19961022	
APPLICATION INFO.:	US 1994-291292		19940816	(8)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Kight, III, John
ASSISTANT EXAMINER: White, Everett
LEGAL REPRESENTATIVE: Helfgott & Karas, P.C.
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 5
NUMBER OF DRAWINGS: 12 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT: 612
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A method for producing a substantially stable water-soluble polysaccharide conjugate of a polyene **antibiotic** is described. The method comprises the following steps: (a) activating the polysaccharide to a **dialdehyde** by periodate oxidation; (b) purifying the **dialdehyde** from interfering anions and by-products; (c) coupling the polyene to the purified **dialdehyde** by Schiff base formation to form the conjugate; and (d) purifying the conjugate. In a preferred embodiment, the conjugate of step (c) is reduced to an amine conjugate by a reducing agent prior to purification. Also described are imine and amine polysaccaride conjugates of the polyene Nystatin.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 53 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 5
ACCESSION NUMBER: 1996:759674 CAPLUS
DOCUMENT NUMBER: 126:101726
TITLE: Infraspecific variation of insecticidal sesquiterpene dialdehydes in Pseudowintera colorata
AUTHOR(S): Perry, Nigel B.; Foster, Lysa M.; Lorimer, Stephen D.
CORPORATE SOURCE: New Zealand Institute for Crop and Food Research Ltd., University of Otago, Dunedin, N. Z.
SOURCE: Phytochemistry (1996), 43(6), 1201-1203
CODEN: PYTCAS; ISSN: 0031-9422
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal

LANGUAGE: English

AB HPLC and NMR methods are described for determining the levels of the sesquiterpene dialdehydes polygodial and 9-deoxymuzigadial in the foliage of Pseudowintera colorata. Analytes of 25 individual plants, from four populations on the South Island of New Zealand, showed two chemotypes: a mixed chemotype with similar levels of polygodial and 9-deoxymuzigadial, and a polygodial chemotype with very low levels of 9-deoxymuzigadial. Only the polygodial chemotype was found in northern and southwestern populations, both chemotypes were found in a central eastern population, and only the mixed chemotype was found in a southeastern population.

L5 ANSWER 54 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1996:167381 CAPLUS
DOCUMENT NUMBER: 124:241542
TITLE: An overview of ozonation disinfection byproducts
AUTHOR(S): Weinberg, Howard S.; Glaze, William H.
CORPORATE SOURCE: Department Environmental Sciences and Engineering, University North Carolina, Chapel Hill, NC, USA
SOURCE: Disinfection By-Products in Water Treatment (1996), 165-86. Editor(s): Minear, Roger A.; Amy, Gary L. Lewis: Boca Raton, Fla.
CODEN: 62LVA4
DOCUMENT TYPE: Conference
LANGUAGE: English

AB The major ozone **disinfection** byproducts (DBPs) resulting from ozone treatment of surface or groundwaters have been identified as low mol. weight aliphatic aldehydes, in particular formaldehyde and acetaldehyde, the **dialdehyde** glyoxal, and the keto-aldehyde Me glyoxal. Other partial oxidation byproducts with carbonyl functionalities include glyoxylic, keto-malonic, and pyruvic acids. Hydrogen peroxide and organic peroxides have also been found in plants using ozone but appear to be removed, as are the aldehydes, by filters that possess an active biomass. Bromide, in raw waters, engages ozone in a complex cycle in which both organic bromide and inorg. bromate are end products. This paper describes a recent large-scale study of the occurrence and formation of ozone DBPs and show how studies of these byproducts can be used to control their formation in finished water.

L5 ANSWER 55 OF 122 MEDLINE on STN DUPLICATE 6
ACCESSION NUMBER: 97097731 MEDLINE
DOCUMENT NUMBER: PubMed ID: 9054096
TITLE: [Lipid peroxidation and Ca-dependent ATPase activity in the microsomal fraction of renal tissue in patients with nephrolithiasis and chronic pyelonephritis]. Perekisnoe okislenie lipidov i Ca-zavisimaia ATFaznaia aktivnost' mikrosomnoi fraktsii pochechnoi tkani bol'nykh nefrolitiazom i khronicheskim pielonefritom.
AUTHOR: Golod E A
SOURCE: Urologiia i nefrologiia, (1996 Sep-Oct) (5) 14-6.
Journal code: 0032352. ISSN: 0042-1154.
PUB. COUNTRY: RUSSIA: Russian Federation
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Russian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199703
ENTRY DATE: Entered STN: 19970321
Last Updated on STN: 19970321
Entered Medline: 19970307

AB The author has estimated levels of malonic **dialdehyde** (MDA) indicative of activity of membrane phospholipid peroxidation activity, basal and true (in incubation in the culture containing glomeruloform **antibiotic** alameticin) Ca-ATPase activity in microsomal fraction isolated from cortical tissue of functioning kidneys obtained intraoperatively from 26 patients. 12 samples of cortical tissue obtained from uninvolved parts of the kidneys affected with carcinoma served as

control. 14 samples were obtained from the tissue of functioning kidneys affected with nephrolithiasis and active chronic pyelonephritis. The investigations show elevated MDA levels, enhanced basal in reduced true Ca-ATPase activity of microsomes from the kidneys of patients with nephrolithiasis and active chronic pyelonephritis compared to control. It is suggested that high basal against low true Ca-ATPase activity of renal microsomes may be explained by increased permeability of renal membranes for Ca2+ under activation of lipid peroxidation in active chronic pyelonephritis and nephrolithiasis.

L5 ANSWER 56 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 7
ACCESSION NUMBER: 1995:1008161 CAPLUS
DOCUMENT NUMBER: 124:51050
TITLE: Antifungal and antibacterial activity of 3-formyl-7,11-dimethyl-(2E,6Z,10)-dodecatrien-1-al in the mandibular gland of Lasius fuliginosus Latreille
AUTHOR(S): Akino, Toshiharu; Tsurushima, Tetsu; Yamoka, Ryohei
CORPORATE SOURCE: Dep. Appl. Biol., Kyoto Inst. Technol., Kyoto, 606, Japan
SOURCE: Nippon Oyo Dobutsu Konchu Gakkaishi (1995), 39(4), 329-33
CODEN: NIPTAR; ISSN: 0021-4914
PUBLISHER: Nippon Oyo Dobutsu Konchu Gakkai
DOCUMENT TYPE: Journal
LANGUAGE: Japanese
AB An anti-microbial substance in the mandibular gland of L. fuliginosus was identified as 3-formyl-7,11-dimethyl-(2E,6Z,10)-dodecatrien-1-al. This substance inhibited the germination of spores of plant pathogens such as Colletoctrichum lagenarium, Fusarium oxysporum Schlechtendahl, Gibberella fujikuroi Saw. WR., Pestulotia lingiseta, Pyricularia oryzae Cavara, Verticillium dahliae, and of insect pathogens such as Metabhizium anisopliae F126, Beawerisa bassiana F18, Paecilomyces fumosoroseus 522, Verticillium lecanii F126. Moreover, it also inhibited the growth of gram pos. and gram neg. bacteria. Comparison with dendrolasin, farnesal, and farnesol suggested that the structure of the **dialdehyde** double bond contributes to the **antimicrobial** activity.

L5 ANSWER 57 OF 122 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 1995:398642 BIOSIS
DOCUMENT NUMBER: PREV199598412942
TITLE: Toxic terpenoids isolated from higher fungi.
AUTHOR(S): Sterner, Olov [Reprint author]; Anke, Heidrun
CORPORATE SOURCE: Div. Organic Chem. 2, University Lund, PO Box 124, S22100 Lund, Sweden
SOURCE: Czech Mycology, (1995) Vol. 48, No. 1, pp. 39-52.
DOCUMENT TYPE: Article
General Review; (Literature Review)
LANGUAGE: English
ENTRY DATE: Entered STN: 13 Sep 1995
Last Updated on STN: 13 Sep 1995
AB A large number of toxic terpenoids have been isolated from cultures and fruit bodies of higher fungi. The chemistry, biological activity and possible natural functions of some of them are discussed in this paper. Especially interesting in this respect are natural defensive compounds that possess for example antibiotic and antifeedant actives and are likely to be toxic. The sesquiterpenoids of the pungent Lactarius species (e.g. L. necator, L. piperatus, L. rufus and L. vellereus) constitute an interesting example of this. In the fruit bodies of these species within seconds after an physical injury, an apparently inactive precursor is converted enzymatically into a range of pungent sesquiterpenes with an unsaturated **dialdehyde** functionality possessing potent **antimicrobial** and cytotoxic activities. The injury brings the precursor, which is present as an emulsion in the latex of specialised hyphae of the fruit bodies, in contact with the enzyme systems that are

kept apart in the intact fruit body. Fruit bodies of non-pungent and edible Lactarius species (e.g. L. deliciosus and L. flavidulus) contain precursors with completely different chemical structures that also are converted as a response to injury, although to products with less striking biological activities and with uncertain function.

L5 ANSWER 58 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:638480 CAPLUS
DOCUMENT NUMBER: 121:238480
TITLE: Aqueous disinfectant concentrates comprising aldehydes and alcohols, for surfaces and medical instruments.
INVENTOR(S): Eggensperger, Heinz; Loewer, Bernd; Mohr, Michael; Goroncy-Bermes, Peter; Kleinwort, Rolf; Beilfus, Wolfgang
PATENT ASSIGNEE(S): Schuelke und Mayr GmbH, Germany
SOURCE: Ger. Offen., 9 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4301295	A1	19940721	DE 1993-4301295	19930115
DE 4301295	C2	19990408		
US 5496858	A	19960305	US 1994-179856	19940111
EP 668014	A1	19950823	EP 1994-250040	19940221
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, SE				

PRIORITY APPLN. INFO.: DE 1993-4301295 A 19930115
AB The title concs. comprise succinic dialdehyde, glutaric dialdehyde and/or formaldehyde, and an alc. which has a water-miscibility of 0.1-2 % by weight and a vapor pressure <2 mbar (20°). Suitable alcs. are hexyldiglycol, 2-ethylhexyldiglycol, phenoxypropanol, phenethyl alc. and 3-phenyl-1-propanol. The concs. are stable, and yield upon dilution low-odor disinfectants which are substrate-compatible and highly active. No activation of the aldehyde is required.

L5 ANSWER 59 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1995:470292 CAPLUS
DOCUMENT NUMBER: 122:268741
TITLE: Disinfectant toilet detergents
INVENTOR(S): Zhang, Changhui
PATENT ASSIGNEE(S): Peop. Rep. China
SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 5 pp.
CODEN: CNXXEV
DOCUMENT TYPE: Patent
LANGUAGE: Chinese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
CN 1081709	A	19940209	CN 1993-107679	19930702

PRIORITY APPLN. INFO.: CN 1993-107679 19930702
AB Detergents comprise HCl 10-30, surfactants (polyoxyethylene ethers) 0.5-4, corrosion inhibitors 0.5-5, disinfectants 0.5-3, organic solvents 0.1-5, and water 60-70%. The disinfectants are Lysol, trichloroisocyanuric acid, glyoxal, etc.

L5 ANSWER 60 OF 122 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 1994:125149 BIOSIS
DOCUMENT NUMBER: PREV199497138149
TITLE: Effects of egg disinfection on yolk sac and first feeding

stages of halibut (Hippoglossus hippoglossus L.) larvae.
AUTHOR(S): Harboe, Torstein [Reprint author]; Huse, Ingvar; Oie, Gunvor
CORPORATE SOURCE: Inst. Marine Res., Austevoll Aquaculture Res. Stn., N-5392, Storebo, Norway
SOURCE: Aquaculture, (1994) Vol. 119, No. 2-3, pp. 157-165. CODEN: AQCLAL. ISSN: 0044-8486.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 24 Mar 1994
Last Updated on STN: 18 Nov 1994

AB Halibut eggs were treated with the **disinfectant** glutaric **dialdehyde** in two regimes, 400 ppm for 10 min and 800 ppm for 2.5 min. Treatment effects were evaluated by analyses of egg mortality, performance of deformed larvae, survival during the yolk-sac period, and growth and survival during first feeding. To evaluate effects of disinfection on the first feeding stage, two separate feeding regimes, Artemia salina and wild zooplankton, were tested. No significant differences in survival or percentage of deformed larvae were found between the larval groups during the yolk-sac period. Differences in survival appeared during start feeding where eggs exposed to 400 ppm glutaric dialdehyde showed significantly higher survival than did the 800 ppm and control (untreated) group on both food types. The 400 ppm group also showed higher growth, which was most pronounced with wild zooplankton.

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CONTINUE? (Y)/N:y

L5 ANSWER 61 OF 122 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 95080762 EMBASE
DOCUMENT NUMBER: 1995080762
TITLE: Does peroperatory antibiotic prophylaxis inhibit blood lipid peroxidation?.
AUTHOR: Galikowsky M.; Sklodowska M.; Koktysz R.; Pinkowski R.; Paradowski M.
CORPORATE SOURCE: First Surgical Department, Military Medical Academy, S. Zeromskiego 113,90-549 Lodz, Poland
SOURCE: Research in Surgery, (1994) Vol. 6, No. 2, pp. 90-93. ISSN: 0214-5987 CODEN: RSURES
COUNTRY: Spain
DOCUMENT TYPE: Journal; Article
FILE SEGMENT: 004 Microbiology
009 Surgery
037 Drug Literature Index
048 Gastroenterology
LANGUAGE: English
SUMMARY LANGUAGE: English
ENTRY DATE: Entered STN: 950329
Last Updated on STN: 950329

AB Peroperatory antibiotic prophylaxis was applied in a clean and in a septic cholecystectomy model in rabbits, to determine blood lipid peroxidation. The animals that did not receive **antibiotic** prophylaxis showed increased serum malonyl **dialdehyde** (MDA) concentrations during the 90 min, of the experiment. The starting value in Group A (clean cholecystectomy) was 1.92 ± 0.04 nmol/ml, and the final level was 2.82 ± 0.28 nmol/ml (analysis of variance $F = 23.67$, d.f. = 27, $p < 0.05$). The starting value in Group C (septic cholecystectomy) was 2.60 ± 0.24 nmol/ml, and the final level was 3.24 ± 0.37 nmol/ml (analysis of variance $F = 10.51$, d.f. = 27, $p < 0.05$). In Groups B (clean

cholecystectomy with prophylaxis) and D (septic cholecystectomy with prophylaxis), in which 250 mg/kg cefoperazone were injected as antibiotic prophylaxis, the MDA concentrations in blood remained stable (analysis of variance p > 0.05).

L5 ANSWER 62 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1994:2797 CAPLUS
DOCUMENT NUMBER: 120:2797
TITLE: Phenoxyalkanol-containing disinfectant.
INVENTOR(S): Eggensperger, Heinz; Loewer, Bernd; Goroncy-Bermes; Mohr, Michael
PATENT ASSIGNEE(S): Schuelke und Mayr GmbH, Germany
SOURCE: Ger., 5 pp.
CODEN: GWXXAW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4217690	C1	19930923	DE 1992-4217690	19920525
PRIORITY APPLN. INFO.:			DE 1992-4217690	19920525

AB Environmentally-safe highly-effective disinfectants comprise aldehydes, alkylalkanols and phenoxyalkanols. A composition contained formaldehyde 9, glyoxal 3.6, glutardialdehyde 3.75, 2-ethylhexanol 5, and 1-phenoxy-2-propanol - 2-phenoxy-1-propanol mixture (84:16) 5 g. The composition showed a higher rate of biol. degradation than the conventional disinfectant Lysovet PH.

L5 ANSWER 63 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1993:546680 CAPLUS
DOCUMENT NUMBER: 119:146680
TITLE: Imidazole stabilizers for aldehyde disinfectans.
INVENTOR(S): Eggensperger, Heinz; Beilfuss, Wolfgang
PATENT ASSIGNEE(S): Schuelke und Mayr GmbH, Germany
SOURCE: Ger. Offen., 12 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 4201391	A1	19930722	DE 1992-4201391	19920121
DE 4201391	C2	19950713		
EP 552853	A1	19930728	EP 1993-250017	19930118
EP 552853	B1	19980527		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, NL, SE				
AT 166533	E	19980615	AT 1993-250017	19930118
PRIORITY APPLN. INFO.:			DE 1992-4201391 A	19920121

AB Imidazole and its derivs. are stabilizers for aldehyde disinfectants and preservatives. A formulation contained glutardialdehyde (50%) 2.0, imidazole 0.5, iso-PrOH 70.0, and water 27.5 parts. After 1 yr storage, only 5% glutardialdehyde degradation was observed, compared to 33% in a control without imidazole.

L5 ANSWER 64 OF 122 USPATFULL on STN
ACCESSION NUMBER: 93:87327 USPATFULL
TITLE: Saccharide copolymers having antibacterial activity
INVENTOR(S): Conti, Franco, Milan, Italy
PATENT ASSIGNEE(S): Etablissement Texcontor, Liechtenstein (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5254540		19931019
APPLICATION INFO.:	US 1989-447846		19891208 (7)

	NUMBER	DATE
PRIORITY INFORMATION:	IT 1989-21262	19890721

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Brown, Johnnie R.
ASSISTANT EXAMINER: White, Everett
LEGAL REPRESENTATIVE: Birch, Stewart, Kolasch & Birch
NUMBER OF CLAIMS: 2
EXEMPLARY CLAIM: 1,2
LINE COUNT: 346
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Saccharide copolymers having **antibacterial** activity obtained by copolymerization of an oligosaccharide or polysaccharide with a nitrogen containing vinyl derivative, quaternarization of the obtained copolymer followed by oxidation of the oligosaccharide or polysaccharide monomer unit with formation of the corresponding **dialdehyde.**

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 65 OF 122 USPATFULL on STN
ACCESSION NUMBER: 93:42115 USPATFULL
TITLE: Water soluble acrylic polymerizable materials, polymers made from them, and processes of making them
INVENTOR(S): Langley, John G., West Yorkshire, England
Mistry, Kishor K., West Yorkshire, England
Symes, Kenneth C., West Yorkshire, England
PATENT ASSIGNEE(S): Allied Colloids Limited, England (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 5214096		19930525
APPLICATION INFO.:	US 1991-801586		19911202 (7)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 1991-656019, filed on 15 Feb 1991, now abandoned which is a continuation of Ser. No. US 1989-307428, filed on 7 Feb 1989, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	GB 1988-2789	19880208
	GB 1988-2790	19880208

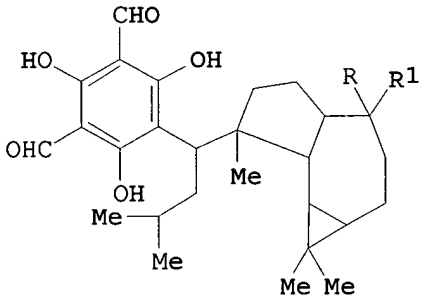
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Schofer, Joseph L.
ASSISTANT EXAMINER: Walker, Alex H.
LEGAL REPRESENTATIVE: Ostrolenk, Faber, Gerb & Soffen
NUMBER OF CLAIMS: 11
EXEMPLARY CLAIM: 1
LINE COUNT: 825
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Water soluble polymerizable acrylic prepolymers can be formed from ethylenically unsaturated monomers that include monomers that provide a pendant group that is a blocked, saturated, ethylenic group, followed by unblocking the pendant saturated ethylenic group to leave a pendant ethylenically unsaturated group. These prepolymers can be copolymerized through these unsaturated groups, for instance after impregnation into a permeable substrate as in chemical grouting or shut off processes, to form cross linked solid polymers. The polymerizable monomers that are ethylenically unsaturated but which also include the blocked ethylenic

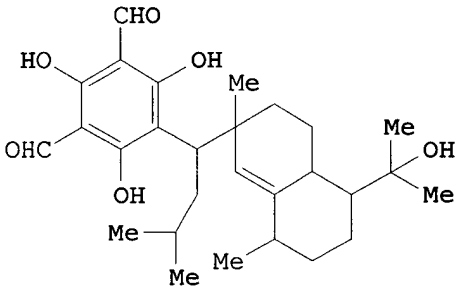
group are also novel.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 66 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 8
ACCESSION NUMBER: 1993:120923 CAPLUS
DOCUMENT NUMBER: 118:120923
TITLE: Isolation and characterization of macrocarpals B-G antibacterial compounds from Eucalyptus macrocarpa
AUTHOR(S): Yamakoshi, Yoko; Murata, Masatsune; Shimizu, Akiyo; Homma, Seiichi
CORPORATE SOURCE: Dep. Nutr. Food Sci., Ochanomizu Univ., Tokyo, 112, Japan
SOURCE: Bioscience, Biotechnology, and Biochemistry (1992), 56(10), 1570-6
CODEN: BBBIEJ; ISSN: 0916-8451
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I, R=OH, R^1=Me
III, RR^1=CH_2



II

AB Six novel phloroglucinol **dialdehyde** diterpene derivs. (macrocarpals B-G), which have **antibacterial** activity, were isolated from leaves of E. macrocarpa. These compds. have closely related structures, the mol. formula for B-F being C18H4006, and that of G being C28H3805. The structures of macrocarpals B (I), D (II), and G (III) were analyzed by NMR .

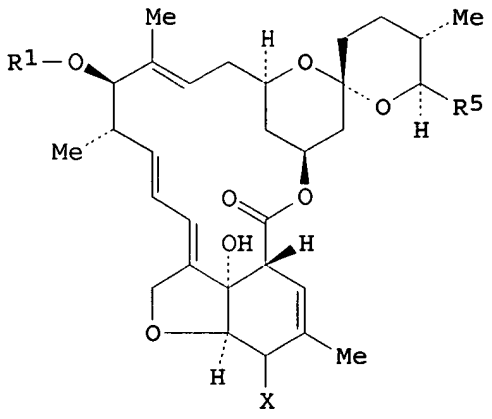
L5 ANSWER 67 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1992:598454 CAPLUS
DOCUMENT NUMBER: 117:198454
TITLE: Lysozyme immobilization on a cellulosic textile support
AUTHOR(S): Medusheva, E. O.; Ignatyuk, T. E.; Ryl'tsev, V. V.
CORPORATE SOURCE: NPO "Tekstil'galantereya", Russia
SOURCE: Khimicheskie Volokna (1992), (3), 38-40
CODEN: KVLKA4; ISSN: 0023-1118
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Lysozyme was immobilized on a cellulose dialdehyde textile support from

1/15M phosphate buffer (pH = 7.0) for 24 and 48 h at 37 and 40°, resp., for treatment of purulent and necrotic wounds. Enzymic activity increased by an increase of time of lysozyme contact with cellulose support. Although γ sterilization (25 kGy) decreased the enzymic activity by .apprx.30%, lysozyme concentration on immobilized preparation was high enough for therapeutic effects.

L5 ANSWER 68 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1992:128510 CAPLUS
DOCUMENT NUMBER: 116:128510
TITLE: Preparation of milbemycin ethers as anthelmintics, insecticides, and acaricides
INVENTOR(S): Morisawa, Yasuhiro; Saito, Akio; Toyama, Toshimitsu; Kaneko, Susumu
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 62 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 448243	A1	19910925	EP 1991-301749	19910301
EP 448243	B1	19960117		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
JP 04211087	A2	19920803	JP 1991-20858	19910214
US 5346918	A	19940913	US 1991-661833	19910227
KR 168848	B1	19990115	KR 1991-3395	19910228
CA 2037414	AA	19910902	CA 1991-2037414	19910301
AU 9172026	A1	19910905	AU 1991-72026	19910301
AU 634864	B2	19930304		
ZA 9101533	A	19911224	ZA 1991-1533	19910301
EP 552817	A2	19930728	EP 1993-105233	19910301
EP 552817	A3	19931006		
EP 552817	B1	19980527		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
EP 552818	A2	19930728	EP 1993-105234	19910301
EP 552818	A3	19931006		
EP 552818	B1	19970611		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
AT 133174	E	19960215	AT 1991-301749	19910301
ES 2084767	T3	19960516	ES 1991-301749	19910301
AT 154357	E	19970615	AT 1993-105234	19910301
ES 2104987	T3	19971016	ES 1993-105234	19910301
AT 166651	E	19980615	AT 1993-105233	19910301
ES 2117678	T3	19980816	ES 1993-105233	19910301
US 5604182	A	19970218	US 1994-273240	19940711
PRIORITY APPLN. INFO.:			JP 1990-50760 A	19900301
			US 1991-661833 A3	19910227

OTHER SOURCE(S): MARPAT 116:128510
GI



I

AB The title compds. [I; R1 = C4-8 alkyl, C4-8 cycloalkyl, C1-4 alkyl substituted by an (un)substituted C3-8 cycloalkyl, various aromatic and/or heterocycle-containing groups; R5 = Me, Et, Me2CH, EtMeCH; X = HO, C1-5 alkanoyloxy, hydroxyimino] were prepared as anthelmintics, insecticides, and acaricides (no data for the latter 2 activities) by derivatization(s) of 13-iodo-5-oxomilbemycin A4 (II), which is available from its natural or semisynthetic 13-hydroxy analog. Thys, 13-(5-nitro-2-indanyloxy)milbemycin A4 (preparation by etherification of II with 5-nitro-2-indanol followed by reduction of 5-oxo group with NaBH4 given) was reduced by Zn powder in 90 volume% aqueous AcOH (ice-cooling). The resulting 5-amino intermediate was condensed with Me isocyanate in THF to give the title ether 13-[5-(3-methylureido)-2-indanyloxy]milbemycin A4 which at 0.125 mg/kg in rats gave 98.0% control of Nippostongylus brasiliensis, vs. 49.5% for the known 13-methoxymilbemycin A4. Forty I were prepared and the anthelmintic activities of 12 I reported.

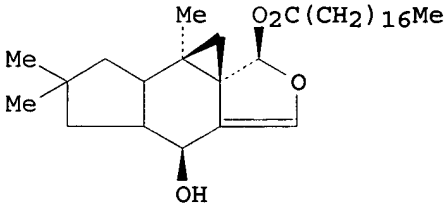
L5 ANSWER 69 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:209483 CAPLUS
DOCUMENT NUMBER: 114:209483
TITLE: Saccharide copolymers having antibacterial activity
INVENTOR(S): Conti, Franco
PATENT ASSIGNEE(S): Etablissement Texcontor, Liechtenstein
SOURCE: Eur. Pat. Appl., 13 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 409076	A2	19910123	EP 1990-113316	19900712
EP 409076	A3	19910529		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 5254540	A	19931019	US 1989-447846	19891208
JP 03070701	A2	19910326	JP 1990-189592	19900719
PRIORITY APPLN. INFO.:			IT 1989-21262 A	19890721

AB The low-toxicity title saccharide polymers are obtained by copolymn. of an oligo- or polysaccharide with a N-containing vinyl compound followed by quaternizing and selectively oxidizing the vicinal diols of sugar moieties giving dialdehydes. Thus, a suspension of 50.0 g corn starch in 500 mL water, after boiling, was cooled, mixed with 63% NHO3 to 1.5 N concentrate, flushed with N, and stirred with 100 mL 4-vinylpyridine in the presence of Ce(IV) ammonium nitrate [to 0.01 M (Ce(IV) concentration] for 12 h. The product, after isolation, was (70 g) quaternized with 100 mL EtBr in 500 mL MeOH,

and oxidized by Na periodate to give the desired dialdehyde. A bactericidal assay using the above product showed pos. results.

L5 ANSWER 70 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 9
ACCESSION NUMBER: 1991:468523 CAPLUS
DOCUMENT NUMBER: 115:68523
TITLE: Studies of the conversions of sesquiterpenes in injured fruit bodies of Lactarius vellereus. A biomimetic transformation of stearoylvelutinal to isovelleral
AUTHOR(S): Hansson, Thomas; Sterner, Olov
CORPORATE SOURCE: Chem. Cent., Univ. Lund, Lund, S-221 00, Swed.
SOURCE: Tetrahedron Letters (1991), 32(22), 2541-4
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 115:68523
GI



I

AB An intermediate (I) in the conversion of stearoylvelutinal to the **antibiotic** unsatd. **dialdehyde** isovelleral in injured fruit bodies of L. vellereus is proposed. Further insight in the enzymic conversions of sesquiterpenes in this species was obtained by feeding expts. with isovelleral labeled with 2H.

L5 ANSWER 71 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1992:50866 CAPLUS
DOCUMENT NUMBER: 116:50866
TITLE: Comparison of the antimicrobial and cytotoxic activities of twenty unsaturated sesquiterpene dialdehydes from plants and mushrooms
AUTHOR(S): Anke, Heidrun; Sterner, Olov
CORPORATE SOURCE: Dep. Biotechnol., Univ. Kaiserslautern, Kaiserslautern, D-6750, Swed.
SOURCE: Planta Medica (1991), 57(4), 344-6
CODEN: PLMEAA; ISSN: 0032-0943
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Twenty unsatd. sesquiterpene dialdehydes were tested for antimicrobial, algaecidal, cytotoxic, and mutagenic activity. In addition to the known antifungal activity, polygodial also exhibited antibacterial and cytotoxic activity, epipolygodial was slightly less active. The most active compds. were: isovelleral, isoisovelleral, velleral, and methylmarasmate. With the exception of velleral, they also exhibited mutagenic activity in the Salmonella/microsome assay. Derivatization to less polar compds. usually increased the antimicrobial and cytotoxic effects and reduced mutagenicity, while the introduction of hydroxyl groups had the reverse effect.

L5 ANSWER 72 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1991:180330 CAPLUS
DOCUMENT NUMBER: 114:180330
TITLE: Liquid industrial microbicides containing quaternary ammonium salts and another microbicide

INVENTOR(S): Werle, Peter; Trageser, Martin; Weiss, Svea
PATENT ASSIGNEE(S): Degussa A.-G., Germany
SOURCE: Eur. Pat. Appl., 14 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 386509	A1	19900912	EP 1990-103087	19900217
EP 386509	B1	19930303		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL				
DE 3907071	A1	19900913	DE 1989-3907071	19890304
AT 86071	E	19930315	AT 1990-103087	19900217

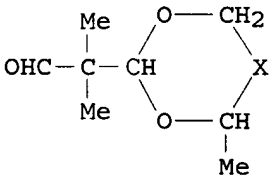
PRIORITY APPLN. INFO.: DE 1989-3907071 A 19890304
EP 1990-103087 A 19900217
OTHER SOURCE(S): CASREACT 114:180330; MARPAT 114:180330

AB An aqueous or alc. microbicide contains ≥1 quaternary ammonium salt [R1R2R3NCH2CH(OH)CH2S(C:S)X]+n A-n (I; X = alkoxy, alkylamino, dialkylamino; R1-3 = alkyl; A = halo, sulfate, etc.; n = 1 or 2] or related compds. and another **biocide**, prefereably prepared in situ from an aliphatic C1-5 mono- or **dialdehyde** and a primary or secondary amine. Other microbicides used with I are alkali metal salts of dithiocarboxylate or dithiocarbamate derivs. The microbicides are useful in tech. production, such as paper, cutting oil, cooling water, etc. I (X = NHMe; R1 = n-C12H25; R2 = R3 = Me; A = Cl; n = 1) (II) was prepared by treating Na N-methyldithiocarbamate with 3-chloro-2-hydroxypropyl-N,N,N-dimethyldodecylammonium chloride in isopropanol. A microbicide containing 10 % II and 90 % 1,3,5-tris(2-hydroxyethyl)hexahydro-s-triazine (III) (prepared from formaldehyde and ethanolamine) demonstrated at 100 ppm the same activity against Aspergillus niger as did 50 ppm II or 250 ppm III by themselves.

L5 ANSWER 73 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1990:551834 CAPLUS
DOCUMENT NUMBER: 113:151834
TITLE: Method for the preparation of 1,3-dialdehydes and their monoacetals
INVENTOR(S): Driscoll, Robert Kenneth; Leupold, Ernst Ingo
PATENT ASSIGNEE(S): Hoechst A.-G., Germany
SOURCE: Ger. Offen., 5 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3837103	A1	19900503	DE 1988-3837103	19881101

PRIORITY APPLN. INFO.: DE 1988-3837103 19881101
OTHER SOURCE(S): CASREACT 113:151834; MARPAT 113:151834
GI



I

AB R1R2C(CHO)2 (R1, R2 = C1-8 alkyl, C6-10 aryl), useful as crosslinking agents and disinfectants, e.g., substitutes for CH2O (no data), were prepared by oxidative dehydrogenation of HOCH2CR1R2CH(OR3)OR4 (R3, R4 = any of groups defined for R1, R2), or the appropriate cyclic acetals in the gas phase at 300-700°, over a metal catalyst, e.g., Ag, on a carrier. Thus, 22.4 g/h of 90% (2-hydroxy-tert-butyl)-4-methyl-1,3-dioxane (preparation given) was fed into a tubular reactor packed with an AgNO3-impregnated and activated aluminosilicate catalyst (preparation given) in a stream of N (135 NL/h) and 0 (20.7 NL/h) which were preheated at 440°, and the reaction was carried out over 27 h at that temperature to give 452.5 g title compound I (a conversion of 94.7%).

L5 ANSWER 74 OF 122 USPATFULL on STN
ACCESSION NUMBER: 90:80231 USPATFULL
TITLE: Camera positioning system
INVENTOR(S): Cane, Richard M., 6142 Miramar Pkwy., Miramar, FL, United States 33023

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4963903		19901016
APPLICATION INFO.:	US 1989-426290		19891025 (7)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Gellner, Michael L.
LEGAL REPRESENTATIVE: Silverman, Melvin K.
NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 4 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 308
AB A system for positioning a camera relative to a work area including a clamp means situated outside of the work area, and extension and support element which operates to maintain a given position thereof. The system further includes camera mechanically held within a socket at an end of said position retention element. A high resolution solid state and miniature video TV camera serves as said camera. The system offers a simple, convenient method of close-up monitoring or video taping in which the video camera can be positioned directly over the area of surgical operation or industrial inspection. The camera can be easily moved and rotated to any position offering extreme macro close-ups, which close-ups can be video taped for later use in educational and quality control processes.

L5 ANSWER 75 OF 122 USPATFULL on STN
ACCESSION NUMBER: 90:54559 USPATFULL
TITLE: Fermentation process for the production of xanthane
INVENTOR(S): Eyssautier, Bruno, Carentan, France
PATENT ASSIGNEE(S): SANOFI, Societe Anonyme, Paris, France (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4940663		19900710
APPLICATION INFO.:	US 1988-209932		19880622 (7)

	NUMBER	DATE
PRIORITY INFORMATION:	FR 1987-8727	19870622

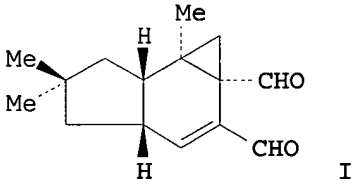
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Stone, Jacqueline
ASSISTANT EXAMINER: Witz, Jean
LEGAL REPRESENTATIVE: Foley & Lardner, Schwartz, Jeffery, Schwaab, Mack,

Blumenthal & Evans
NUMBER OF CLAIMS: 6
EXEMPLARY CLAIM: 1
LINE COUNT: 260
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The invention relates to a process for the fermentation of carbohydrates by bacteria of the genus Xanthomonas for the production of a polysaccharide of the xanthane type, in which the source of nitrogen consists of a gelatin with a molecular weight of less than 5000.

Application: preparation of xanthane.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 76 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1990:631702 CAPLUS
DOCUMENT NUMBER: 113:231702
TITLE: A total synthesis of (+)-isovelleral. The absolute configuration of the Russulaceae sesquiterpenes
AUTHOR(S): Bergman, R.; Hansson, T.; Sterner, O.; Wickberg, B.
CORPORATE SOURCE: Div. Org. Chem., AB Haessle, Moelndal, S-431 83, Swed.
SOURCE: Journal of the Chemical Society, Chemical Communications (1990), (12), 865-7
CODEN: JCCCAT; ISSN: 0022-4936
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 113:231702
GI



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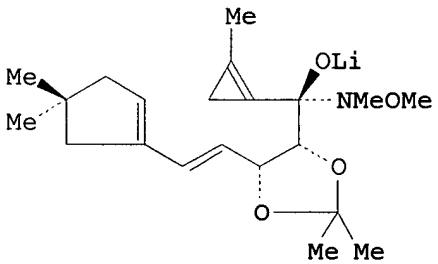


II

AB (+)-Isovelleral (I) an **antibiotic** and antifeedant sesquiterpene **dialdehyde** from Basidiomycetes, was synthesized via a diastereoselective intramol. Diels-Alder cyclization of chiral intermediate II derived from D-ribonolactone.

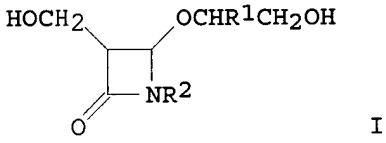
L5 ANSWER 77 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1992:11201 CAPLUS
DOCUMENT NUMBER: 116:11201
TITLE: Change in the content of aldehyde groups in dialdehyde cellulose samples after gamma-irradiation and during storage
AUTHOR(S): Belov, A. A.; Gritsenko, S. I.; Ryl'tsev, V. V.
CORPORATE SOURCE: USSR
SOURCE: Issled. v Obl. Sozdaniya Tekstil. Izdelii Med. Naznacheniya. NPO Tekstil.-galant. Prom-sti "Tekstil'galantereya", VNII Tekstil.-galant. Prom-sti (VNIITGP), M. (1990) 36-9
From: Ref. Zh., Khim. 1991, Abstr. No. 10S448
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB Title only translated.

L5 ANSWER 78 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN

ACCESSION NUMBER: 1991:81405 CAPLUS
DOCUMENT NUMBER: 114:81405
TITLE: Preparation of 3-(hydroxymethyl)-4-alkoxy-2-azetidinone derivatives
INVENTOR(S): Belzecki, Czeslaw; Chmielewski, Marek; Kaluza, Zbigniew; Szymanski, Jerzy; Ruczaj, Zbigniew
PATENT ASSIGNEE(S): Polska Akademia Nauk, Instytut Chemii Organicznej, Pol.; Tarchominskie Zaklady Farmaceutyczne "Polfa"
SOURCE: Pol., 6 pp. Abstracted and indexed from the unexamined application.
CODEN: POXXA7
DOCUMENT TYPE: Patent
LANGUAGE: Polish
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PL 148349	B2	19891031	PL 1987-264941	19870401
PRIORITY APPLN. INFO.:			PL 1987-264941	19870401

OTHER SOURCE(S): MARPAT 114:81405
GI



I

AB Title compds. I (R1 = H, alkyl, halomethyl, protected HOCH2; R2 = alkyl, PhCH2, alkoxycarbonyl, aryloxycarbonyl, PhCH2O2C) useful in preparation of oxacephem or oxapenem **antibiotics**, are prepared by oxidation of a 2-deoxy-2-carboxyglycosylaminolactam with HIO4 to a **dialdehyde** which is then reduced with NaBH4. (3S,4R)-I (R1 = H, R2 = PhCH2) was prepared

L5 ANSWER 79 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1989:532916 CAPLUS
DOCUMENT NUMBER: 111:132916
TITLE: Packed soups or soft foods containing surfactants and modified starch
INVENTOR(S): Nireki, Yasuhiko; Hayasaka, Ibuki; Kawamoto, Hiromi; Yoshida, Etsuko
PATENT ASSIGNEE(S): Kanebo, Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 01043173	A2	19890215	JP 1987-198840	19870807
JP 04035147	B4	19920610		
PRIORITY APPLN. INFO.:			JP 1987-198840	19870807

AB The title packed foods such as corn potage soup, shiruko (adzuki-bean soup), or milk shake contain antibacterial surfactants and starch, at least part of which is replaced by modified starch. The modified starch does not affect the antibacterial properties of the surfactants and gives

enough viscosity to soups, etc. Edible vegetable fat and oil 1.5, sugar 1.2, NaCl 0.5, milk powder 0.4, frozen corn 4.5, sucrose fatty acid ester 0.05, starch phosphate 1%, and H2O were mixed, flat sour (sic) spores were inoculated at 9.2 + 105/mL , and the preparation heat-sterilized to manufacture canned corn potage soup, which kept well for 2 wk at 55° with good viscosity and flavor.

L5 ANSWER 80 OF 122 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1989:434067 BIOSIS
DOCUMENT NUMBER: PREV198937078676; BR37:78676
TITLE: ODORLESS AROMATIC **DIALDEHYDE DISINFECTING** AND **STERILIZING** COMPOSITION US PATENT-4851449. JULY 25 1989.
AUTHOR(S): BRUCKNER N I [Inventor, Reprint author]; GORDON M D [Inventor]; HOWELL R G [Inventor]
CORPORATE SOURCE: PLANO, TEX, USA
ASSIGNEE: SURGIKOS, INC
PATENT INFORMATION: US 4851449 19890725
SOURCE: Official Gazette of the United States Patent and Trademark Office Patents, (1989) Vol. 1104, No. 4, pp. 2701.
CODEN: OGUPE7. ISSN: 0098-1133.
DOCUMENT TYPE: Patent
FILE SEGMENT: BR
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 21 Sep 1989
Last Updated on STN: 21 Sep 1989

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L5 ANSWER 81 OF 122 USPATFULL on STN

ACCESSION NUMBER: 89:15218 USPATFULL
TITLE: Method for production of α,ω-dialdehydes
INVENTOR(S): Tokitoh, Yasuo, Kurashiki, Japan
Yoshimura, Noriaki, Kurashiki, Japan
PATENT ASSIGNEE(S): Kuraray Co., Ltd., Kurashiki, Japan (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4808756		19890228	
APPLICATION INFO.:	US 1987-104988		19871006	(7)

	NUMBER	DATE
PRIORITY INFORMATION:	JP 1986-80347	19860407

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Lone, Werren B.
LEGAL REPRESENTATIVE: Oblon, Fisher, Spivak, McClelland & Maier
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
LINE COUNT: 705
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The method for producing α,ω-dialdehydes from α,ω-diolefins or α,ω-alkenals in good yield and with high efficiency. The expensive rhodium catalyst for hydroformylation can be reused without any substantial attrition of activity. Moreover, since the loses of the catalyst, monodentate phosphine and sulfolane used in the hydroformylation reaction are

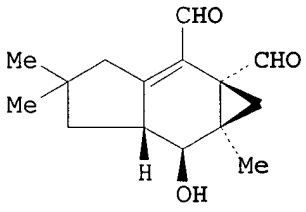
minimal, the method is commercially advantageous.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 82 OF 122 MEDLINE on STN
ACCESSION NUMBER: 90166036 MEDLINE
DOCUMENT NUMBER: PubMed ID: 2624594
TITLE: [Derivatives of daunorubicin containing an inosine fragment].
Proizvodnye daunorubitsina, soderzhashchie fragment inozina.
AUTHOR: Olsuf'eva E N; Todorova N P; Iartseva I V; Rozynov B V; Shepelevtseva N G; Preobrazhenskaia M N
SOURCE: Bioorganicheskaia khimiia, (1989 Nov) 15 (11) 1569-72.
Journal code: 7804941. ISSN: 0132-3423.
PUB. COUNTRY: USSR
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Russian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 199003
ENTRY DATE: Entered STN: 19900601
Last Updated on STN: 19900601
Entered Medline: 19900319

AB Condensation of daunorubicin or its (13 R, S)-dihydro derivative with inosine **dialdehyde** in the presence of NaBH3CN yielded novel derivatives of anthracycline **antibiotics** with incorporated inosine residue: 3'-deamino-3'-[(2" R)-(hypoxanthyl-9)-(6" S)-hydroxymethylmorpholino-N4"]- daunorubicin and (13 R,S)-dihydro-3'-deamino-3'-[(2" R)-(hypoxanthyl-9)-(6" S)- hydroxymethylmorpholino-N4"]-daunorubicin. The compounds did not inhibit growth of Bacillus mycoides and were less cytotoxic in vitro and less toxic in vivo than the parent antibiotics.

L5 ANSWER 83 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 10
ACCESSION NUMBER: 1989:470321 CAPLUS
DOCUMENT NUMBER: 111:70321
TITLE: Structure-activity relationships for unsaturated dialdehydes. 3. Mutagenic, antimicrobial, cytotoxic, and phytotoxic activities of merulidial derivatives
AUTHOR(S): Anke, Heidrun; Sterner, Olov; Steglich, Wolfgang
CORPORATE SOURCE: Dep. Biotechnol., Univ. Kaiserslautern, Kaiserslautern, D-6750, Fed. Rep. Ger.
SOURCE: Journal of Antibiotics (1989), 42(5), 738-44
CODEN: JANTAJ; ISSN: 0021-8820
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB The mutagenic activity in the Ames' Salmonella assay, the **antimicrobial** activities against bacteria, fungi, and algae, the cytotoxic activities against Ehrlich ascitic tumor cells and L1210 cells, and the phytotoxic activities against Lepidium sativum and Setaria

italica, of the unsatd. **dialdehyde** merulidial (I) and six acetylated, hydroxylated, and cyclopropane ring-isomerized derivs. of merulidial are compared. Some structure-activity relationships are discussed.

L5 ANSWER 84 OF 122 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1989:198982 BIOSIS
DOCUMENT NUMBER: PREV198987099886; BA87:99886
TITLE: OPTICALLY PURE 3 4-DISUBSTITUTED AZETIDINONES FROM SUGARS.
AUTHOR(S): CHMIELEWSKI M [Reprint author]; KALUZA Z; ABRAMSKI W; GRODNER J; BELZECKI C; SEDMERA P
CORPORATE SOURCE: INST ORGANIC CHEM, POLISH ACAD SCI, 01-224 WARSAW, POL
SOURCE: Tetrahedron, (1989) Vol. 45, No. 1, pp. 277-232. CODEN: TETRAB. ISSN: 0040-4020.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
ENTRY DATE: Entered STN: 20 Apr 1989
Last Updated on STN: 20 Jun 1989

AB Glycolic cleavage of the vic-diol grouping present in N-benzyl-2-carboxy-2-deoxypento and hexopyranosylaminolactams (5, 6, and 7) with sodium metaperiodate under standard conditions leads to formation of reactive dialdehydes 13 and 14 which upon standing undergo intramolecular aldol condensation to afford bicyclic β-lactams having a four-membered ring fused to the furanoid system. Reduction of dialdehydes 13 and 14 with sodium borohydride gives optically pure 3,4-disubstituted azetidinones 15, 17, 19, and 20 which can serve as starting materials for the synthesis of 1-oxabicyclic β-lactams.

L5 ANSWER 85 OF 122 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1989:482296 BIOSIS
DOCUMENT NUMBER: PREV198937103415; BR37:103415
TITLE: EFFECT OF ENDOSULFANE ISOMERS AND ITS PRIMARY METABOLITE ON THE STATE OF MICROSOMAL SYSTEMS OF THE LIVER.
AUTHOR(S): KOSHKARYAN A O [Reprint author]; ASLANYAN G TS; MIRZOYAN M A; ALOYAN G A; AVAKYAN A KH
CORPORATE SOURCE: BRANCH, ALL-UNION RES INST HYG TOXICOL PESTIC POLYM PLAST, MINIST HEALTH USSR, YEREVAN, USSR
SOURCE: Gigiena i Sanitariya, (1989) No. 3, pp. 93-94. CODEN: GISAAA. ISSN: 0016-9900.
DOCUMENT TYPE: Article
FILE SEGMENT: BR
LANGUAGE: RUSSIAN
ENTRY DATE: Entered STN: 26 Oct 1989
Last Updated on STN: 28 Oct 1989

L5 ANSWER 86 OF 122 USPATFULL on STN

ACCESSION NUMBER: 88:26176 USPATFULL
TITLE: Process for preparing pure 5-hydroxymethylfurfuraldehyde
INVENTOR(S): Rapp, Knut M., Offstein, Germany, Federal Republic of
PATENT ASSIGNEE(S): Suddeutsche Zucker-Aktiengesellschaft, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4740605		19880426	
APPLICATION INFO.:	US 1987-2340		19870112	(7)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1986-3601281	19860117

DOCUMENT TYPE: Utility

FILE SEGMENT: Granted
PRIMARY EXAMINER: Raymond, Richard L.
LEGAL REPRESENTATIVE: Armstrong, Nikaido, Marmelstein & Kubovcik
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 2 Drawing Figure(s); 2 Drawing Page(s)
LINE COUNT: 417
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention refers to a process for preparing 5-hydroxymethylfurfuraldehyde, which is also called HMF. This compound was yet prepared by dehydration of fructose-containing carbohydrates in the presence of various catalysts. Nevertheless, the separation of HMF from starting material, by-products and organic solvents was difficult and disadvantageous, especially by the presence of organic solvents. Surprisingly, it came out, that it is possible, to separate 5-hydroxymethylfurfuraldehyde from reaction mixtures, which are obtained by reactions of saccharides with an acid catalyst, in great purity and good yield with exclusive utilization of water as solvent, by means of ion exchangers, and to crystallize it out from chromatographic fractions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 87 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1989:35984 CAPLUS
DOCUMENT NUMBER: 110:35984
TITLE: Free-radical transformations in γ-irradiated enzymes upon long-term storage
AUTHOR(S): Ryltsev, V. V.; Virnik, R. B.; Dovbii, E. V.; Filatov, V. N.
CORPORATE SOURCE: All-Union Res. Inst. Text. Haberdash. Ind., Moscow, USSR
SOURCE: Radiobiologiya (1988), 28(5), 584-7
CODEN: RADOA8; ISSN: 0033-8192
DOCUMENT TYPE: Journal
LANGUAGE: Russian
AB ESR was used to study free radical processes occurring in x-ray-sterilized enzymes upon long-term storage (≤4 yr) both at room temperature and at 4°. Simultaneously studied was the biol. activity of γ-irradiated enzymes subjected to a long-term storage. The immobilization of enzymes on dialdehyde cellulose or polycaproamide preserved their biol. activity during the postirradn. storage.

L5 ANSWER 88 OF 122 MEDLINE on STN DUPLICATE 11
ACCESSION NUMBER: 88252286 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3382732
TITLE: [Changes in the lipid peroxidation activity and intensity of tissue respiration during healing of aseptic and infected wounds in animal experiments].
Dinamika izmenenii aktivnosti perekisnogo okisleniia lipidov i intensivnosti tkanevogo dykhaniia pri zazhivlenii asepticheskikh i infitsirovannykh ran v eksperimente.
AUTHOR: Taran Iu P; Nikolaev A V; Mamedov L A; Eliseeva S V; Zakharov V V
SOURCE: Biulleten' eksperimental'noi biologii i meditsiny, (1988 May) 105 (5) 552-4.
Journal code: 0370627. ISSN: 0365-9615.
PUB. COUNTRY: USSR
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Russian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198808
ENTRY DATE: Entered STN: 19900308
Last Updated on STN: 19900308
Entered Medline: 19880809

AB The variance of lipid peroxidation (LPO) was studied by the concentrations of malonic **dialdehyde** (MDA) in the tissue of wound bed and blood serum on the model of surface musculocutaneous **aseptic** and infected wounds simulated in 250 rats. The speed of oxygen consumption by isolated wound tissue was determined simultaneously. It was stated that the time course of MDA concentration in wounds and sera as well as tissue respiration in animals with infected wounds differed from those in animals with aseptic wounds. In a whole, MDA levels were found to be higher in cases with infected wounds and of changeable character. The latter animals demonstrated less intensive respiration of granulation tissue. Correlation between the variance of tissue respiration and MDA levels was established as was that of LPO and respiration with the phases of wound process. The findings could be used for the development of pathogenetic therapy and evaluation of its efficacy.

L5 ANSWER 89 OF 122 MEDLINE on STN DUPLICATE 12
ACCESSION NUMBER: 87258027 MEDLINE
DOCUMENT NUMBER: PubMed ID: 3299075
TITLE: Structure-activity relationships for unsaturated dialdehydes. 1. The mutagenic activity of 18 compounds in the Salmonella/microsome assay.
AUTHOR: Sterner O; Carter R E; Nilsson L M
SOURCE: Mutation research, (1987 Jul) 188 (3) 169-74. Journal code: 0400763. ISSN: 0027-5107.
PUB. COUNTRY: Netherlands
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198707
ENTRY DATE: Entered STN: 19900305
Last Updated on STN: 19900305
Entered Medline: 19870729

AB A considerable number of terpenes that contain an "unsaturated **dialdehyde**" functionality, and possess various biological activities, such as **antimicrobial** activity, pungency, antifeedant activity, and/or mutagenicity, have been isolated from natural sources. However, large qualitative and quantitative activity differences have been observed for the natural unsaturated dialdehydes, and small structural changes (e.g., stereoisomerization) seem to dramatically affect the biological activity. As part of a general attempt to study structure-activity relationships for unsaturated dialdehydes, the activity of compounds 1-18 (Table 1) in the Salmonella/microsome assay (strains TA98, TA2637 and TA100) has been investigated. 10 of the compounds were found to possess direct-acting mutagenic activity, although the mutagenic potencies vary considerably in this group (from 430 to 0.32 revertants per nmole in the Salmonella strain TA2637). Some structural features that appear to moderate the activity are discussed. The necessity of an intact unsaturated dialdehyde functionality for the mutagenic activity of isovelleral (1) (see Scheme 1 for names, numbers, and chemical structures) in the Salmonella/microsome assay was demonstrated by chemical conversions: modification of either aldehyde group or reduction of the double bond led to loss of activity.

L5 ANSWER 90 OF 122 USPATFULL on STN
ACCESSION NUMBER: 86:37984 USPATFULL
TITLE: Collagen preparation
INVENTOR(S): Walter, Peter, Unterpfaffenhofen-Harthaus, Germany, Federal Republic of
Walter, Michael, Munich, Germany, Federal Republic of
PATENT ASSIGNEE(S): HEYL Chemisch-pharmazeutische Fabrik GmbH & Co KG, Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4597762		19860701

APPLICATION INFO.: US 1981-319882 19811110 (6)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1980-3042860	19801113

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Rosen, Sam
ASSISTANT EXAMINER: Herald, William J.
LEGAL REPRESENTATIVE: Bierman, Peroff & Muserlian
NUMBER OF CLAIMS: 21
EXEMPLARY CLAIM: 1,16
LINE COUNT: 538
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A collagen preparation comprising collagen-I for human or veterinary medicine obtainable by proteolyzing, cross-linking, reducing, optionally heat treating, and finally sterilizing mammalian collagen I material under conservation of its biological texture.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 91 OF 122 USPATFULL on STN
ACCESSION NUMBER: 86:18789 USPATFULL
TITLE: Process for producing stilbene-4,4'-dialdehyde
INVENTOR(S): Reinehr, Dieter, Kandern, Germany, Federal Republic of
Spencer, Alwyn, Basel, Switzerland
PATENT ASSIGNEE(S): Ciba-Geigy Corporation, Ardsley, NY, United States
(U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4579975		19860401
APPLICATION INFO.:	US 1985-712453		19850313 (6)

RELATED APPLN. INFO.: Continuation of Ser. No. US 1982-422925, filed on 24 Sep 1982, now abandoned
DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Helfin, Bernard
LEGAL REPRESENTATIVE: Roberts, Edward McC., Mansfield, Kevin T.
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
LINE COUNT: 227
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Stilbene-4,4'-dialdehyde can be produced by reaction of ethylene with 4-bromobenzaldehyde in the presence of a base and of a palladium compound as catalyst in a simple and economical manner in high yields, by performing the reaction under a partial pressure of ethylene of 0.01 to 1 bar. The stilbene-4,4'-dialdehyde obtained is suitable for example for producing optical brighteners.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 92 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1986:421536 CAPLUS
DOCUMENT NUMBER: 105:21536
TITLE: Thiosemicarbazones of starch dialdehyde and their biological activity
AUTHOR(S): Barabasz, W.; Chociej, J.; Kenit, A.; Tomasik, P.
CORPORATE SOURCE: Dep. Microbiol., Hugon Kollataj Acad. Agric., Krakow, 30059, Pol.
SOURCE: Starch/Staerke (1986), 38(4), 129-31
CODEN: STARDD; ISSN: 0038-9056
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Starch dialdehyde thiosemicarbazones were prepared from starch dialdehyde

and thiosemicarbazide. Addition of thiosemicarbazide to 2% starch dialdehyde in H2O-BuOH (4:1) at 70° produced preparation B (in filtrate of reaction mixture). Preparation B inhibited the growth of bacteria and fungi.
Preparation B
contained starch dialdehyde dithiosemicarbazone tetrahydrate with 10.2 mols. of thiosemicarbazide and 6.7% elemental S.

L5 ANSWER 93 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1986:52841 CAPLUS
DOCUMENT NUMBER: 104:52841
TITLE: Reconditioning bacteria-contaminated hydrogen sulfide removal systems
INVENTOR(S): Delaney, Dennis D.
PATENT ASSIGNEE(S): Union Oil Co., USA
SOURCE: U.S., 9 pp.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4532117	A	19850730	US 1983-565113	19831220

PRIORITY APPLN. INFO.: US 1983-565113 19831220
AB The reconditioning method consists of adding a bactericidal agent and a surfactant to the aqueous wash solution in a H2S-removal system. The agent is an
aliphatic dialdehyde, OHC(CH2)xCHO, where x is 0 to about 10, e.g., glyoxal, succinaldehyde, hexa-2,4-dienal, methylglutaraldehyde, adipaldehyde. The surfactant can be a poly(oxyethylene) condensate with a terminal residue containing 10-18 C atoms, e.g., poly(oxyethylene) aliphatic ethers, alkaryl ethers, esters, or amides; a copolymer of polypropylene and polyethylene oxides; or an ethylene oxide adduct of acetylenic glycols.

L5 ANSWER 94 OF 122 EMBASE COPYRIGHT (c) 2006 Elsevier B.V. All rights reserved on STN
ACCESSION NUMBER: 85170684 EMBASE
DOCUMENT NUMBER: 1985170684
TITLE: [Concerning three clinical cases of contact eczema to a **dialdehyde** contained in a **disinfectant** of common use in the hospital].
A PROPOS DE TROIS CAS CLINIQUES D'ECZEMA DE CONTACT A UN DIALDEHYDE CONTENU DANS UN PRODUIT DESINFECTANT D'UTILISATION COURANTE EN HOPITAL.
AUTHOR: Callies F.X.; Taieb M.; Domont A.; et al.
CORPORATE SOURCE: Service de Dermato-Allergologie, Hopital Saint-Louis, Paris, France
SOURCE: Archives des Maladies Professionnelles de Medecine du Travail et de Securite Sociale, (1985) Vol. 46, No. 2, pp. 109-110.
CODEN: AMPMAR
COUNTRY: France
DOCUMENT TYPE: Journal
FILE SEGMENT: 035 Occupational Health and Industrial Medicine
013 Dermatology and Venereology
026 Immunology, Serology and Transplantation
052 Toxicology
LANGUAGE: French
ENTRY DATE: Entered STN: 911210
Last Updated on STN: 911210
DATA NOT AVAILABLE FOR THIS ACCESSION NUMBER

L5 ANSWER 95 OF 122 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN

ACCESSION NUMBER: 1985:341262 BIOSIS
DOCUMENT NUMBER: PREV198580011254; BA80:11254
TITLE: LABORATORY EVALUATION OF DIFFERENT DISINFECTANTS.
AUTHOR(S): SUBRAMANIAM L [Reprint author]; SHRINIWAS; BHUJWALA R A
CORPORATE SOURCE: ALL INDIA INST MED SCI, ANSARI NAGAR, NEW DELHI 110029
SOURCE: Indian Journal of Medical Research, (1985) Vol. 81, No. JAN, pp. 41-45.
CODEN: IJMRAQ. ISSN: 0019-5340.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH

AB Eight disinfectants commonly used in Indian hospitals were subjected to the Kelsey-Sykes' capacity test. The test strains included Pseudomonas aeruginosa (NCTC 6749), Staphylococcus aureus (NCTC 4163), Proteus vulgaris (NCTC 4635) and Escherichia coli (NCTC 8196). The concentrations recommended by manufacturers were not effective in 50% of the preparations tested. The results of the study suggested that catheters, cystoscopes, endoscopes and other similar instruments should be kept for at least 3 h in a **disinfectant** containing 2% **dialdehyde** with sodium bicarbonate. Cheatle forceps, thermometers and other such instruments used repeatedly should be kept in 5% disinfectant containing hibitane (chlorhexidine gluconate), the disinfectant solution being changed every day. Floors, walls, furniture, bath-tubs, sinks, bed-pans, trolleys and similar equipment are to be washed with detergent and then disinfected with iodophors; carbolic acid, phenylphenol, xylenol can also be used for this purpose. These measures are suggested as a policy for use of disinfectants in Indian hospitals.

L5 ANSWER 96 OF 122 MEDLINE on STN
ACCESSION NUMBER: 85013875 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6483471
TITLE: [Method of disinfecting plague-infected fleas in preparation for electron microscopic study].
K metodike obezzarazhivaniia infitsirovannykh vozbuditelem chumy blokh pri podgotovke k elektronno-mikroskopicheskomu issledovaniiu.
AUTHOR: Shchedrin V I; Vashchenok V S; Shashaev M A; Briukhanov L V; Osipova S P
SOURCE: Parazitologiia, (1984 Jul-Aug) 18 (4) 317-8.
Journal code: 0101672. ISSN: 0031-1847.
PUB. COUNTRY: USSR
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: Russian
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198411
ENTRY DATE: Entered STN: 19900320
Last Updated on STN: 19900320
Entered Medline: 19841115

AB During fixation of fleas infected with plague agent (with preliminary cut heads, limbs and posterior part of the abdomen) in 2.5% glutaric **dialdehyde** or 2% osmium tetroxide their **disinfection** was obtained in two days. After double fixation with 2-hour exposure in each of these fixators disinfection of the material was acheived only after additional 2-day maintenance in 70% ethyl alcohol. Fleas, which had been placed into fixators or in 70% ethyl alcohol after double fixation without preliminary dissection, were disinfected completely only in 10 days.

L5 ANSWER 97 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN
ACCESSION NUMBER: 1984:153699 CAPLUS
DOCUMENT NUMBER: 100:153699
TITLE: Structure-activity relationship of the Warburgia sesquiterpene dialdehydes
AUTHOR(S): Taniguchi, Makoto; Adachi, Takeshi; Oi, Susumu; Kimura, Akihiko; Katsumura, Shigeo; Isoe, Sachihiko; Kubo, Isao

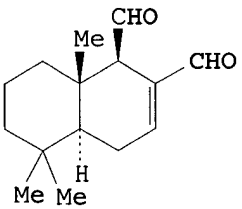
CORPORATE SOURCE: Fac. Sci., Osaka City Univ., Osaka, 558, Japan
SOURCE: Agricultural and Biological Chemistry (1984), 48(1), 73-8
CODEN: ABCHA6; ISSN: 0002-1369
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Sesquiterpene dialdehydes, isolated originally as insect antifeedants from East African Warburgia trees, have strong antimicrobial activity. Their chemical reactivities and biol. activities were compared to those of related compds. There was a good correlation between antifungal activity and papain inhibition by these compds. Both activities appear to result from their highly specific reactivity with sulfhydryl groups. Consideration of the structure-activity relations led to the proposal of a structure unit, the enal-aldehyde moiety, that is essential to biol. activity.

L5 ANSWER 98 OF 122 MEDLINE on STN DUPLICATE 13
ACCESSION NUMBER: 84084459 MEDLINE
DOCUMENT NUMBER: PubMed ID: 6689151
TITLE: Disinfection of gastrointestinal fibrescopes--evaluation of the disinfectants Dettox and Gigasept.
AUTHOR: O'Connor H J; Steele C S; Price J; Lincoln C; Axon A T
SOURCE: Endoscopy, (1983 Nov) 15 (6) 350-2.
Journal code: 0215166. ISSN: 0013-726X.
PUB. COUNTRY: GERMANY, WEST: Germany, Federal Republic of
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 198402
ENTRY DATE: Entered STN: 19900319
Last Updated on STN: 20000303
Entered Medline: 19840214
AB The **disinfectant** solutions Dettox (based on a quaternary ammonium compound) and Gigasept (based on succine **dialdehyde**) were evaluated during **disinfection** procedures with a new **disinfecting** apparatus for gastrointestinal fibrescopes. Thorough disinfection was achieved after 2 minutes using Dettox 8% or Gigasept 10%; persistent fibrescope contamination with Gram-negative organisms was found after disinfection with Dettox 4% or Gigasep 5%. No adverse effects in endoscopy staff or damage to fibrescopes were seen. Adequate disinfection of endoscopic equipment prevents endoscopy-related infection and can be readily achieved by trained endoscopy staff using rapidly bactericidal disinfectants.

L5 ANSWER 99 OF 122 BIOSIS COPYRIGHT (c) 2006 The Thomson Corporation on STN
ACCESSION NUMBER: 1984:172495 BIOSIS
DOCUMENT NUMBER: PREV198477005479; BA77:5479
TITLE: A POTENT CYTO TOXIC WARBURGANAL AND RELATED DRIMANE TYPE SESQUI TERPENOIDS FROM POLYGONUM-HYDROPIPER.
AUTHOR(S): FUKUYAMA Y [Reprint author]; SATO T; ASAKAWA Y; TAKEMOTO T
CORPORATE SOURCE: INSTITUTE PHARMACOGNOSY, TOKUSHIMA BUNRI UNIV, YAMASHIRO-CHO, 770 TOKUSHIMA, JPN
SOURCE: Phytochemistry (Oxford), (1982) Vol. 21, No. 12, pp. 2895-2898.
CODEN: PYTCAS. ISSN: 0031-9422.
DOCUMENT TYPE: Article
FILE SEGMENT: BA
LANGUAGE: ENGLISH
AB Warburganal, a drimane-type sesquiterpene **dialdehyde** which has potent cytotoxic [antitumor], antifeedant, **antibiotic** and molluscicidal activities was isolated from the leaf of P. hydropiper [a medicinal plant] together with its related drimane-type sesquiterpenes, polygodial, isopolygodial, isodrimeninol, drimenol and confertifolin, and a nor-sesquiterpene monoaldehyde, polygonal. Polygodial showed anticomplement activity (10.5 μg/ml). The distribution of drimane-type

sesquiterpenoids in the plants of taxonomically different levels is discussed.

L5 ANSWER 100 OF 122 CAPLUS COPYRIGHT 2006 ACS on STN DUPLICATE 14
ACCESSION NUMBER: 1982:403571 CAPLUS
DOCUMENT NUMBER: 97:3571
TITLE: Antibiotic substances from New Zealand plants. II. Polygodial, an anti-Candida agent from Pseudowintera colorata
AUTHOR(S): McCallion, Rosemary F.; Cole, A. L. J.; Walker, J. R. L.; Blunt, J. W.; Munro, M. H. G.
CORPORATE SOURCE: Bot. Dep., Univ. Canterbury, Christchurch, N. Z.
SOURCE: Planta Medica (1982), 44(3), 134-8
CODEN: PLMEAA; ISSN: 0032-0943
DOCUMENT TYPE: Journal
LANGUAGE: English
GI



I

AB The bicyclic sesquiterpene **dialdehyde** polygodial (I; 9β-drim-7-en-11,12-dial) was isolated from leaves of the New Zealand tree P. colorata and shown to possess strong **antibiotic** activity against the yeast Candida albicans. Polygodial was also found in Drimys winteri, but was absent from P. axillaris and P. traversii. The 9α-epimer, 9α-drim-7-en-11,12-diol, also obtained from P. colorata, exhibited bactericidal activity.

L5 ANSWER 101 OF 122 USPATFULL on STN
ACCESSION NUMBER: 81:56035 USPATFULL
TITLE: Servicing composition for spraying on medical instruments
INVENTOR(S): Eibofner, Eugen, Biberach, Germany, Federal Republic of
PATENT ASSIGNEE(S): Kaltenbach & Voight GmbH & Co., Germany, Federal Republic of (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 4294797		19811013
APPLICATION INFO.:	US 1980-141363		19800418 (6)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1979-2916552	19790424

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Richman, Barry
LEGAL REPRESENTATIVE: Scully, Scott, Murphy & Presser
NUMBER OF CLAIMS: 1
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 1 Drawing Figure(s); 1 Drawing Page(s)
LINE COUNT: 162
AB A servicing composition which is sprayed from a container on or into a medical instrument e.g. a dental handpiece. The servicing composition

includes an oil and propellant mixture for lubrication purposes but, for improved sterlizing purposes during subsequent hot-air heating and **sterilizing** of a medical instrument, an alcohol-aldehyde active substance combination in a proportion of 5 to 15% by weight is added to the mixture which is sprayed on the instrument. The preferred alcohol is isopropanol and the preferred aldehyde is formaldehyde or a succinic acid **dialdehyde** complex, and the preferred ratio of alcohol to aldehyde is 1:1.

L5 ANSWER 102 OF 122 USPATFULL on STN
ACCESSION NUMBER: 81:27516 USPATFULL
TITLE: Injectable embolization and occlusion solution
INVENTOR(S): Muxfeldt, Hans, Norderstedt, Germany, Federal Republic of
Dahlke, Hermann, Hamburg, Germany, Federal Republic of
PATENT ASSIGNEE(S): Ethicon, Inc., Somerville, NJ, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4268495		19810519	
APPLICATION INFO.:	US 1979-1802		19790108	(6)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Padgett, Benjamin R.
ASSISTANT EXAMINER: Nucker, Christine M.
LEGAL REPRESENTATIVE: Eberhardt, Wayne R.
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
LINE COUNT: 426
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB An injectable embolization and occlusion solution for the selective closure of organs, their duct systems, or blood vessels, comprises a solution of a prolamine such as zein in a physiologically compatible solvent such as ethanol. The solution is injected into the site to be treated where the prolamine quickly precipitates in the body fluids to occlude the site area.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L5 ANSWER 103 OF 122 USPATFULL on STN
ACCESSION NUMBER: 80:61810 USPATFULL
TITLE: Cyclic double hemiacetals of enediol compounds and compositions and methods for preparing and using same
INVENTOR(S): Szent-Gyorgyi, Albert, Woods Hole, MA, United States
Fodor, Gabor B., Morgantown, WV, United States
PATENT ASSIGNEE(S): National Foundation for Cancer Research, Bethesda, MD, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 4238500		19801209	
APPLICATION INFO.:	US 1979-27692		19790406	(6)

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Randolph, John D.
ASSISTANT EXAMINER: Fan, Jane T.
LEGAL REPRESENTATIVE: Fidelman, Wolffe & Waldron
NUMBER OF CLAIMS: 10
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 523
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel chemical compounds of the general formulae: ##STR1## wherein

HUMAN MUTATION 10:322–325 (1997)

METHOD

Quantitative Enriched PCR (QEPCR), a Highly Sensitive Method for Detection of K-*ras* Oncogene Mutation

Ze'ev Ronai* and Toshinari Minamoto

Ruttenberg Cancer Center, Mount Sinai School of Medicine, New York, New York; Fax: 212-849-2446

Communicated by R.G.H. Cotton

We have developed a rapid and highly sensitive method for the detection of mutant K-*ras* codon 12 allele in the presence of 10^5 copies of the wild-type alleles. This sensitivity is achieved by selective amplification of mutant K-*ras* sequences, using a two-stage procedure with modified primers. In the first stage, primers consist of K-*ras* sequences in the 3′ portion and polyomavirus sequence (to minimize homology with human genome) on the 5′ portion. The 3′ portion also consists of mismatch sequence that generates an *Mva*I site in normal, but not mutant, K-*ras* codon 12 alleles. Thus, following the first round of 20 cycles, restriction enzyme cleavage is carried out to selectively digest normal K-*ras* codon 12 alleles. To enrich mutant alleles, a second amplification is performed using tail primers that recognize the polyoma, but not human sequences. This design ensures that in the second amplification only mutant alleles that were pre-amplified in the first round would serve as template for this reaction. Ethidium bromide-stained polyacrylamide gel electrophoresis (PAGE) of second-stage PCR product that has been digested with *Mva*I is used to monitor the presence of mutant alleles, detected at sensitivity of $1/10^5$. This technique offers high sensitive detection of mutant K-*ras* alleles using a new concept of tail-primer design and is likely to assist in identifying patients at risk to develop pancreatic, colon, or lung cancer, which harbor high incidence of mutant *ras* alleles. Hum Mutat 10:322–325, 1997.

INTRODUCTION

K-*ras* mutation is among the best characterized biomarkers for early detection of patients at risk for cancer of the colon, pancreas, or lung (Ronai, 1996). Detection of K-*ras* mutation in preneoplastic and normal-appearing tissues requires selective amplification of mutant alleles that constitute only a minute fraction of the total sample analyzed. Various polymerase chain reaction (PCR)-based techniques were developed to enable detection of mutant *ras* alleles at sensitivity of up to 10^{-2} (Ronai, 1996; Mitsudomi et al., 1991; Jacobson and Moskovitz, 1991). The second generation of PCR-based methods incorporated various modifications to achieve sensitivity of up to 10^{-3} (Levi et al., 1991; Chen and Viola, 1991; Kumar et al., 1989; Tada et al., 1993). In earlier studies we had developed and employed enriched PCR (EPCR), a two-step process that enriches, via restriction endonuclease digestion of normal alleles, the fraction of mutant alleles, thus enabling us to identify one mutant allele in 1,000 normal ones (Kahn et al., 1991). The EPCR was successfully used to detect mutant *ras* alleles in normal mucosa of patients with colorectal cancer (Minamoto et al., 1994, 1995, 1996; Ronai et al., 1994); and allowed for the first time the early identification of patients at risk for developing colorectal cancer via analysis of their colonic effluents (Tobi et al., 1994). More recently, the EPCR enabled detection of mutant *ras* alleles in sputum samples of patients with lung cancer, as well as in normal-appearing lung tissues of these patients (Yakubovskaya et al., 1995; Ronai et al., 1997). Modifications of the EPCR that were described by various groups, also led to detection of mutant *ras* alleles in normal-appearing colonic mucosa, pancreatic juice, and in lung and lavages of patients with lung cancer (Iguchi et al., 1996; Mills et al., 1995; reviewed by Yakubovskaya and Ronai, 1995). While the EPCR

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*Correspondence to: Z. Ronai, Ruttenberg Cancer Center, Mount Sinai School of Medicine, One Gustave L. Levy Place, Box 1130, New York, NY 10029. Email zeev-RONAI@smtplink.mssm.edu

Contract grant sponsor: YASUDA Medical Research Foundation, Japan.

provided the foundation for early detection of *ras* oncogene mutation in normal-appearing as well as in non-neoplastic lesions, it was of interest to improve this methodology further while also simplifying it, increasing its sensitivity, decreasing background noise, and enabling quantification of mutation incidence. Here we describe the development of the quantitative enriched PCR (QEPCR), which permits detection of one mutant allele in 100,000 normal alleles via nonradioactive analysis. This increased sensitivity became possible through the use of a new primer design, which eliminates the re-amplification of genomic DNA and selectively improves the enrichment of mutant alleles.

MATERIALS AND METHODS

In the two-step QEPCR (Fig. 1) the first round of amplification consists of 20 cycles (1' @ 94°C; 1' @ 59°C; 1' @ 72°) using 25 ng of the upstream long primer (5′ GCG GTT GGG GCT TAATTGC-ATATAA ACT GAA TAT AAA CTT GTG GTA GTT GGA CCT 3′) and downstream long primer (5′ GCT GTT GTC ATA GTA ATG ATT CAA AGA ATG GTC CTG CAC CAG 3′) in a total volume of 75 µl containing 1 µg genomic DNA, 1.5 mM $MgCl_2$, 0.2 mM each dNTP (final), 0.5 units of Taq DNA polymerase (Perkin-Elmer, Branchburg, NJ), Taq buffer, and Ampliwax (Perkin Elmer).

A 5-µl aliquot of amplified material is taken for restriction enzyme digestion using 12 units of *Mva*I (New England Biolabs) and respective buffer for 2 hr at 37°C in a total volume of 20 µl. Of the digested material, 1 µl is taken for subsequent amplification using 100 ng of the upstream tail primer (5′ GCG GTT GGG GCT TAA TTG CA 3′) and a downstream tail primer (5′ GCT GTT GTC ATA GTA ATG AT 3′). These tail primers overlap the 5′ region of long primers used in the first PCR reaction (Fig. 1). The tail sequence was designed from polyomavirus, to minimize cross-amplification with

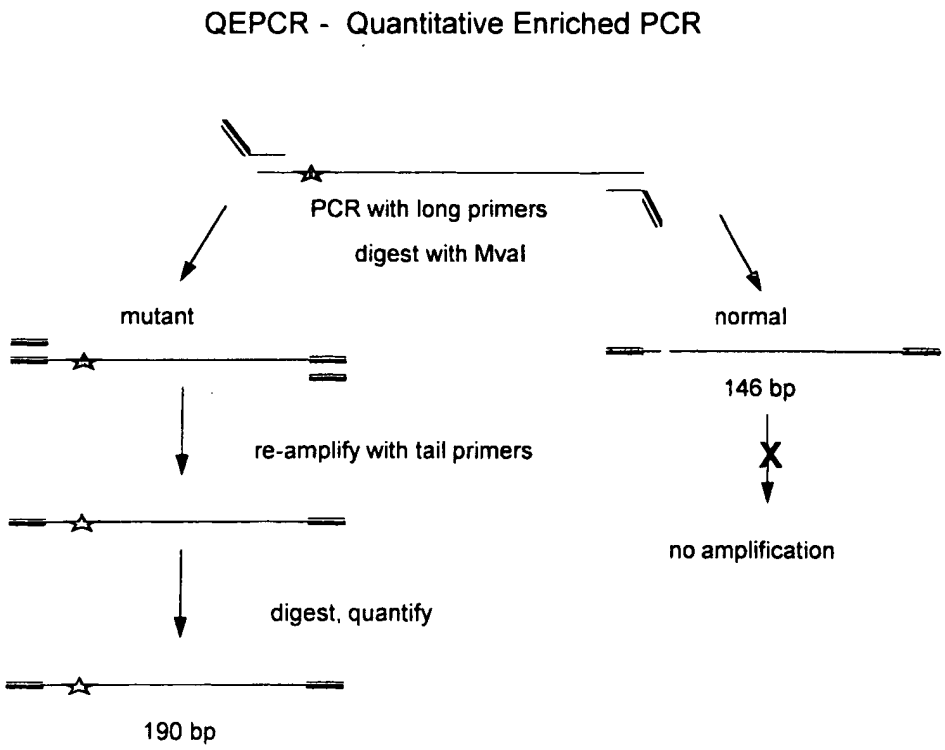

FIGURE 1. The QEPCR is a two-step process. In the first PCR round of 20 cycle amplification, long-tailed primers are used. These primers consist of two portions: the 5′ portion is nonhomologous to human genome and is not used in the first round of PCR amplification. It will serve as a template for the second step of amplification. The 3′ portion of this primer shares the necessary homology with K-*ras* codon 12 sequences. This portion of the primer also consist of a mismatch that will yield a restriction enzyme site in nonmutant amplified sequences. Following the first round of amplification, an aliquot (5 µl) of the amplified material is cleaved by *Mva*I restriction endonuclease, and a fraction (1 µl) of the digested material is used as a template for a second PCR in which the tail primers are used. The use of tail primers in the second step PCR yields a selective amplification of the preamplified DNA and eliminate background amplification of normal alleles from genomic DNA. Following the second round of amplification, the material is again subjected to cleavage with *Mva*I, which allows distinction of the mutant (190-bp) from normal (146-bp) alleles, analyzed on PAGE via ethidium bromide staining.

human genomic DNA. When tail primers are used by themselves, no amplification product is seen (not shown). Following 30 cycles, the amplified product is subjected to restriction enzyme digestion with *MvaI*, which enables to distinguish between mutant and normal alleles via ethidium bromide-stained polyacrylamide gel electrophoresis (PAGE) (10%). As a prerequisite to achieve the sensitivity of the QEPCR all primers need to be purified via PAGE, and the concentration of dNTP must be kept at 0.2 mM (each). The quality of primers should be checked periodically to minimize primer–dimer formation. Reactions were also performed with higher concentrations of genomic DNA (≤ 2.5 μg) with respective adjustments in the amount of primers used.

To determine the sensitivity of the QEPCR, normal placenta DNA obtained for various sources (Clontech, Palo Alto, CA, Sigma, St. Louis, MO) was mixed with decreasing amounts of mutant DNA obtained from SW480 cell line (ATCC) known to harbor mutant K-*ras* codon 12 at both alleles (Capon et al., 1983). Thus, while the concentration of normal alleles is constant (1 μg), the mutant is serially diluted. A portion (15 μl) of amplified material was subjected to *MvaI* digestion followed by separation on PAGE and analysis via ethidium bromide staining.

RESULTS AND DISCUSSION

The outline of the QEPCR is shown in Figure 1. Figure 2 demonstrates the ability of QEPCR to detect mutant alleles at the incidence of 10^{-5}. Important to note is that up to incidence of 10^{-5} only trace amounts of normal alleles are seen (Fig. 2). In spite of the high sensitivity of QEPCR, the overall number of cycles remains the same as that employed in EPCR (total of 50). False-positive results were not observed in either the EPCR or the QEPCR, which was reproduced multiple times. As a norm, each reaction is reproduced over three times. Serial dilutions to determine the sensitivity of this assay were made from multiple sources of normal template DNA.

To identify the type of mutation, nonradioactive amplified material can be dotted onto a nylon membrane, followed by hybridization with specific probes designed for respective mutant alleles. To quantify the reaction shown here the 3′ tail primer could be labeled by either radioactive or fluorescent-tagged, whereas the 5′ tail could be biotin tagged in the second stage of amplification. With this design, material amplified for only 20 cycles (to maintain reaction within logarithmic range) in the second stage QEPCR is incubated with avidin beads (or avidin-coated microplates), followed by extensive washings and quantification of the labeled signal. Digestion of the avidin-bound material eliminate background of nonmutated DNA, as only noncleavable sequences, which represent mutant allele, remain intact. The QEPCR is also amenable to in situ PCR analysis in light of the ability to selectively re-amplify mutant pre-amplified material.

The QEPCR is simpler and more sensitive than previous methods used for detection of K-*ras* point mutation. The greater sensitivity lies in the new concept of primer design. The long-tailed primers used for the first round of amplification generate template that can be selectively amplified by short-tail primers in the second amplification step. When combined with the restriction enzyme digestion of normal alleles, rendering only mutant alleles amplifiable, the high sensitivity of this method is achieved.

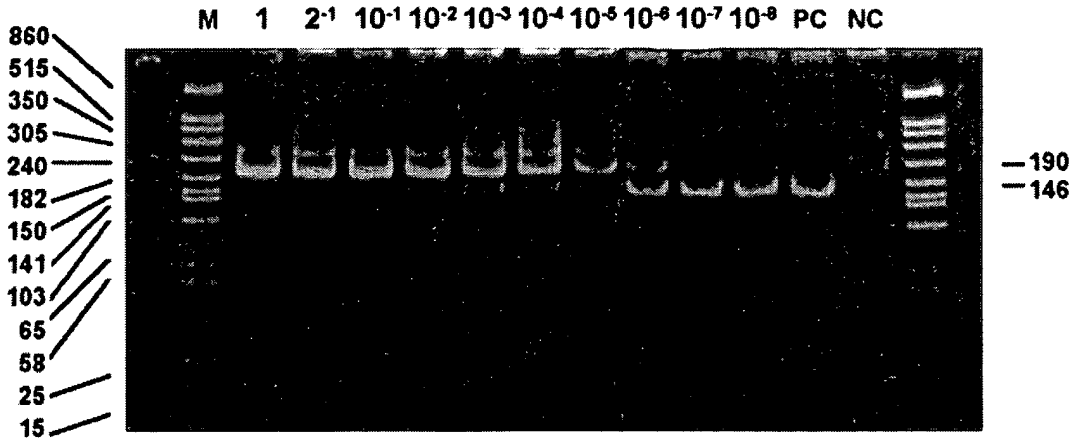

FIGURE 2. Sensitivity of QEPCR is determined by serially diluted mutant DNA (SW 480), mixed with a fixed amount (1 μg) of human placenta DNA, as indicated in Figure. The reaction was carried out as outlined in Figure 1 and analysis performed by ethidium bromide staining of PAGE. Molecular-weight markers are *HpaII* digest of SKII$^+$ plasmid that generates the indicated molecular weight.

The use of long-tailed primers requires special attention to their quality and concentration at all times. An excess of long-tail primers left unused in the first round of amplification or the presence of partially degraded primer results in primer-dimers, creating unwarranted background. While we have not encountered false-positive results, the background generated by the primer-dimers could yield multiple bands hampering analysis via ethidium bromide staining. Among solutions to this situation are recalibrating the amount of primer used, checking their quality (via sequencing gel) and addition of enzyme that selectively digests single-stranded DNA (i.e., S1 nuclease) at the end of the intermediate digestion step. Furthermore, it is possible to reach the sensitivity of the 10^{-5} by using only one of the long-tail primers (not shown). Under the latter setup, the first round of amplification uses the 5′ primer of the EPCR and 3′ long-tailed QEPCR primer, whereas the second round of amplification consists of 3′ tail primer (and the same 5′ primer used for the first round).

While it has thus far been applied to the K-*ras* codon 12 mutation, the QEPCR can be designed for the detection of any other point mutation in oncogenes or tumor suppressor genes (i.e., hot spots). The presence of mutant *ras* alleles in preneoplastic lesions and the association of *ras* mutation with prognosis (Span et al., 1996) points to the potential utility of this biomarker as a tool for risk assessment and early detection of patients at high risk of colorectal, pancreatic or lung cancer, which were found to contain high incidence of K-*ras* mutation.

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REFERENCES

Capon DJ, Seeburg PH, McGath JP, Hayflick JS, Edman U, Levinson AD, Goeddel DV (1983) Activaiton of K-*ras* 2 gene in human colon and lung carcinomas by two different point mutations. Nature 304:506–513.

Chen J, Viola MV (1991) A method to detect *ras* point mutations in small subpopulations of cells. Anal Biochem 195:51–56.

Iguchi H, Sugano K, Fukayama N, Ohkura H, Sadamoto K, Ohkoshi K, Seo Y, Tomoda H, Funakoshi A, Wakasugi H (1996) Analysis of K-*ras* codon 12 mutations in the duodenal juice of patients with pancreatic cancer. Gastroenterology 110:22–226.

Jacobson DR, Moskovits T (1991) Rapid, nonradioactive screening for activating ras oncogene mutations using PCR-primer introduced restriction analysis (PCR-PIRA). PCR Methods Appl 1:146–148.

Kahn SM, Jiang W, Culbertson TA, Weinstein IB, Williams GM, Ronai Z (1991) Rapid and sensitive nonradioactive detection of mutant K-*ras* genes via "enriched" PCR amplificatioin. Oncogene 6:1079–1083.

Kumar R, Sukumar S, Barbacid M (1989) Detection of *ras* oncogenes at the single-cell level. Cancer Cells 7:151–156.

Levi S, Urbano-Isipzua A, Gill R, Thomas DM, Foster C, Marshall CJ (1991) Multiple K-ras codon 12 mutations in cholangiocarcinomas demonstrated with a sensitive polymerase chain reaction technique. Cancer Res 51:3497–3502.

Mills NE, Fishman CL, Rom WN, Dubin N, Jacobson, DR (1995) Increased prevalence of K-*ras* oncogene mutations in lung adenocarcinoma. Cancer Res 55:1444–1447.

Minamoto T, Ronai Z, Yamashita N, Ochiai A, Sugimura T, Mai M, Esumi H (1994) Detection of K-*ras* mutation in non-neoplastic mucosa of Japanese patients with colorectal cancers. Int J Oncol 4:4397–4401.

Minamoto T, Yamashita N, Ochiai A, Mai M, Sugimura T, Ronai Z, Esumi H (1995) Mutant K-*ras* in apparently normal mucosa of colorectal cancer patients. Cancer 75:1520–1526.

Minamoto T, Yamashita N, Ochiai A, Mai M, Sugimura T, Ronai Z, Esumi H (1996) Analysis of mutant K-*ras* in multiple sites of normal appearing mucosa of colorectal cancer patients. Int J Oncol 9:911–915.

Mitsudomi T, Viallet J, Mulshinel JL, Linnoila RI, Mina JD, Gazdar AF (1991) Mutation of ras oncogenes distinguish a subset of non-small-cell lung cancer cell lines from small-cell lung cancer cell lines. Oncogene 6:1353–1362.

Ronai Z, Luo FC, Gradia S, Hart WJ, Butler R (1994) Detectio of K-*ras* mutation in normal and malignant colonic tissues by an enriched PCR method. Int J Oncol 4:391–396.

Ronai Z (1996) Polymerase chain reaction in early detection and monitoring of cancer. In Clinical Diagnosis and Management by Laboratory methods. 19th Edition J.B. Henry Ed. WB Saunders Co., Phil., PA. pp 296–309.

Ronai Z, Yakubovskaya MS, Zhang E, Belitsky GA (1997) K-*ras* mutation in sputum of patients with or without lung cancer. J Cell Biochem 255:172–176.

Span M, Moerkerk PTM, DeGoeij AFPM, Arends JW (1996) A detailed analysis of K-*ras* point mutations in relation to tumor progression and survival in colorectal cancer patients. Int J Cancer 69:241–245.

Tada M, Omata M, Kawai S, Siasho H, Ohto M, Saikik RK, Sninsky JJ (1993) Detection of *ras* gene mutations in pancreatic juice and peripheral blood of patients with pancreatic adenocracinoma. Cancer Res 53:2472–2474.

Tobi M, Luo FC, Ronai Z (1994) Detection of K-*ras* mutaiton in colonic effluent samples from patients without evidence of colorectal carcinoma. J Natl Cancer Inst 86:1007–1010.

Yakubovskaya M, Ronai Z (1995) PCR in clinical diagnosis. J Clin Lab Anal 9:269–283.

Yakubovskaya MS, Spiegelman V, Luo FC, Malaev S, Salinev A, Zborovskaya I, Gasparyan A, Polotsky B, Machaladze Z, Trachtenberg AC, Belitsky GA, Ronai Z (1995) High Frequency of K-ras mutations in normal appearing lung tissues and sputum of patients with lung cancer. Int J Cancer 63:810–814.